# Report of the 6<sup>th</sup> Flow and Virtual Crossmatch Exchange
## *March 23, 2016*

## Flow Cytometric Crossmatch

For the 6<sup>th</sup> Flow Cross Match Exchange, 2 cells (cell nos. 31 - 32) and 4 sera (serum nos. 33 - 36) were examined. Flow crossmatch results are summarized on Table 1 and individual laboratory results, along with reported DSA, are listed in Tables 2 - 9.

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**Cell 31.** The phenotype for this sample from a Vietnamese donor is A*23:01:01G, A*29:01, B*35:02, B*49:01, C*04:01:01G, C*07:01:01G, DRB1*11:04, DRB1*13:02, DRB3*02:02:01G, DRB3*03:01, DQB1*03:01:01G, DQB1*06:04:01G, DPB1*03:01:01G, DPB1*04:02. The flow T-cell crossmatch for this sample was reported as positive against serum 35 and negative against serum 34, without any discrepancies. Two labs reported the crossmatch against serum 33 as negative instead of positive. Results were mixed for serum 36 against this cell, as 8 labs reported the T-cell crossmatch as positive and 6 reported it as negative.

The flow B-cell crossmatch for this sample was reported as positive against all 4 sera. One lab reported the B-cell crossmatch against serum 33 and 34 as negative instead of positive. There were no discrepancies reported for the crossmatches against serum 35 and serum 36.

**Cell 32.** The phenotype for this sample from a Caucasian donor is A*02:01, A*31:01, B*27:05, B*40:01, C*02:02, C*03:04, DRB1*04:04, DRB1*13:01, DRB3*01:01, DRB4*01:01, DQB1*03:02, DQB1*06:03, DPB1*04:01, DPB1*06:01. The flow T-cell crossmatch for cell 32 was reported as positive against sera samples 33, 35, and 36. Against serum 34, it was reported as negative. No discrepancies were observed among the T-cell crossmatches.

For the B-cell crossmatch, all 4 were reported as positive. Only 1 discrepancy was observed, in which 1 lab reported the B-cell crossmatch against serum 34 as negative instead of positive.

**Table 1. Summary of Flow crossmatch results for Cell #031-#032 vs. Serum #033-#036**

| Cell no. | Serum no. | #Labs | T-cell Results | B-cell Results | | Cell no. | Serum no. | #Labs | T-cell Results | B-cell Results |
|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 33 | 14 | **Positive(12)** *Negative(2)* | **Positive(13)** *Negative(1)* | | 32 | 33 | 14 | **Positive(14)** | **Positive(13)** NT(1) |
| 31 | 34 | 14 | **Negative(14)** | **Positive(13)** *Negative(1)* | | 32 | 34 | 14 | **Negative(14)** | **Positive(12)** *Negative(1)* NT(1) |
| 31 | 35 | 14 | **Positive(14)** | **Positive(14)** | | 32 | 35 | 14 | **Positive(14)** | **Positive(13)** NT(1) |
| 31 | 36 | 14 | **Positive(8)** **Negative(6)** | **Positive(14)** | | 32 | 36 | 14 | **Positive(14)** | **Positive(13)** NT(1) |

# Antibody Identification

Class I and class II Luminex single antigen results for serum samples 33 - 36 are summarized on Tables 10 - 13 and individual laboratory results for Luminex and Flow PRA are listed in Tables 14 - 21.

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**Serum 33** was found to be positive for donor-specific antibodies (DSA) against cell 31 and cell 32. Against cell 31, DSA strength was moderate, with mean MFI values of 9422 (A29), 8924 (Cw7), and 5535 (B49). Against cell 32, DSA strength was stronger, as anti-B60, -B27, -Cw10, and –A31 reactivity was reported with MFI values of 16464, 14289, 12188, and 11329, respectively. No class II DSA were reported against cell 31 or cell 32.

For **serum 34,** there were no class I DSA reported against cell 31 or cell 32. Strong class II DSA, however, was detected as labs reported anti-DQ6 (21116) reactivity against each cell. Additional weak DQ7 (2500) reactivity was reported by 3 labs.

**Serum 35** was found to be positive for class I DSA against cell 31 and cell 32. Against cell 31, reactivity to B49 (13050) was reported, along with weak anti-A23 (4824) and -B35 (4050) reactivity. Against cell 32, anti-B60 reactivity was reported with a medium MFI value of 11947. There were no class II DSA reported against cell 31 or cell 32.

For **serum 36**, class I and class II DSA were reported against cell 31 and cell 32. Weak reactivity to B49 (2560) and B35 (1607) was reported against cell 31. By contrast, strong anti-B27 (15366) and -B60 (16647) reactivity was reported against cell 32. Additional reactivity to Cw2 (4794) was also reported against cell 32. DP reactivity (DPw3 and DP402) was reported against cell 31, with respective mean MFI values of 9061 and 9393. In addition, weak DR11 (4545) reactivity was reported against cell 31. Against cell 32, anti-DR11 (4545) and -DPw6 (9643) reactivity was reported.

## Conclusion:

For the **T-cell flow crossmatch**, good agreement was achieved overall among labs for 7 out of 8 crossmatch pairs. Strong class I DSA (MFI values > 9000) reactivity was reported for each positive crossmatch. In the case of the negative crossmatches, no class I DSA were reported. For serum 36 against cell 31, mixed results were observed, as 8 labs reported the cross-match as positive and 6 reported it as negative. A number of labs (n=8) reported the presence of class I DSA (B49), with MFI = 2560 ± 435. The weak class I reactivity observed for serum 36 against cell 31 may account for the variability in the results.

For the **B-cell flow crossmatch,** all 8 crossmatch pairs were reported as positive. Five of the 8 pairs were reported in complete agreement. In each case, strong class I and/or class II DSA were reported against cell 31 and cell 32. Among the 3 remaining crossmatches, 1 lab accounted for the single discrepancy observed for sera samples 33 - 34 against cell 31 and for serum 34 against cell 32.

# Virtual Crossmatch

Virtual crossmatch predictions for donor #001 – #004 against serum (patient) samples MX033 – MX036 are summarized on Tables 22 and individual laboratory predictions are listed in Tables 23 – 38. Fictional donor histories precede each patient-donor summary.

For the virtual T-cell crossmatch, good concordance was achieved overall. There were no discrepancies observed for 9 out of 16 crossmatch predictions. In each case, strong class I DSA were present. Seven of the T-cell predictions had only a single discrepancy. For serum 35 versus donor 3, predictions were mixed, as 5 labs predict the crossmatch to be positive and 4 predict it to be negative. Reported DSA (B48 and B53) against donor 3 were weak to moderate in strength, with MFI values of 6247 and 4677, respectively.

For B-cell predictions, 10 out of 16 were reported with good agreement. In the case of the positive predictions, DSA with MFI values greater than 9000 were present. A number of the DSA were reported at the allele level, including DP402 which differs from DP401 at the antibody recognition site. For the remaining 6 virtual B-cell crossmatches, predications were mixed, as a number of labs predict the virtual B-cell crossmatch to be negative in-

## Table 2. Summary of Virtual crossmatch results for Serum #033-#36 versus Donor #001 - #004

| Donor | Serum no. | #Labs | T-cell Prediction | B-cell Prediction | Predicted Risk Assessment | Donor | Serum no. | #Labs | T-cell Prediction | B-cell Prediction | Predicted Risk Assessment |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 33 | 10 | Pos (10) | Pos (8) Neg(2) | Unacceptable (9) | 2 | 33 | 10 | Pos (10) | Pos (7) Neg (3) | Unacceptable (9) |
| 1 | 34 | 10 | Neg (10) | Pos (10) | Unacceptable (9) | 2 | 34 | 10 | Neg (10) | Pos (6) Neg (4) | Acceptable (5) Unacceptable (4) |
| 1 | 35 | 10 | Neg (9) NT (1) | Neg (8) Pos (1) NT (1) | Acceptable (8) Undetermined (1) | 2 | 35 | 10 | Pos (8) Neg (1) NT (1) | Pos (5) Neg (4) NT (1) | Unacceptable (7) Acceptable (1) Undetermined (1) |
| 1 | 36 | 10 | Pos (9) Neg (1) | Pos (10) | Unacceptable (9) | 2 | 36 | 10 | Pos (9) Neg (1) | Pos (9) Neg (1) | Unacceptable (9) |

| Donor | Serum no. | #Labs | T-cell Prediction | B-cell Prediction | Predicted Risk Assessment | Donor | Serum no. | #Labs | T-cell Prediction | B-cell Prediction | Predicted Risk Assessment |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 33 | 10 | Pos (9) Neg (1) | Pos (6) Neg (4) | Unacceptable (8) Acceptable (1) | 4 | 33 | 10 | Pos (10) | Pos (7) Neg (3) | Unacceptable (9) |
| 3 | 34 | 10 | Neg (10) | Pos (10) | Unacceptable (9) | 4 | 34 | 10 | Neg (10) | Neg (10) | Acceptable (9) |
| 3 | 35 | 10 | Pos (5) Neg (4) NT (1) | Neg (7) Pos (2) NT (1) | Unacceptable (4) Acceptable (4) Undetermined (1) | 4 | 35 | 10 | Pos (9) NT (1) | Pos (6) Neg (3) NT (1) | Unacceptable (8) Undetermined (1) |
| 3 | 36 | 10 | Pos (9) Neg (1) | Pos (9) Neg (1) | Unacceptable (8) Acceptable (1) | 4 | 36 | 10 | Pos (9) Neg (1) | Pos (10) | Unacceptable (9) |

◻ < 80% agreement

stead of positive despite the presence of strong class I DSA. The variability observed in the crossmatch predictions may be due to a number of factors such as variability in DSA reporting and strength and center practice ( e.g. cutoffs, vender and kit used, sera treatment).

For renal transplant risk assessment, good concordance was observed overall among labs. Out of 16 assessments, 11 were reported with no discrepancies. Two labs accounted for the single discrepancy observed for 3

of the assessments. In the presence of DSA, risk assessment was consistent when DSA strength was strong.

In addition to the variability in predictions and risk assessment, there was also variability observed for CPRA values, which ranged from 73 –91. Once again, center practice with regards to risk assessment and cut off values for single antigen reporting may influence the way CPRA values are calculated.

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## Patient 1 (serum #033):

*History: Individual is a 19 year-old female, with no prior pregnancies, being evaluated for her second transplant. The patient's HLA type is A34-A11-B44-B53-Cw4/DR7-DR13-DR52-DR53-DQ6-DQ2. The HLA typing of her first transplant was A2-A68-B53-B44/DR7-DR13-DR52-DR53-DQ2-DQ6.*

For patient 1, class I DSA (B27) was reported against **donor #001** by 10 labs, with the majority (n=8) reporting MFI values > 10,000. Only 2 labs reported the presence of class II DSA (DQB1*02:02) against donor #001. For the virtual crossmatch, all 10 labs predict the T-cell crossmatch to be positive, while 8 out of 10 predict the B-cell crossmatch to be positive. Complete agreement was achieved for the renal transplant risk assessment for this donor-patient pair, as 9 labs noted it as unacceptable from an immunological point of view.

Against **donor #002**, reactivity to B40 (B61) and Cw10 was reported, with respective MFI = 20006 and 12582.. No class II DSA were reported against donor #002. Virtual predictions were reported in complete agreement, with labs predicting the T-cell crossmatch to be positive. For the B-cell crossmatch, 7 labs predict crossmatch outcome to be positive, while 3

predict it to be negative. Renal transplant risk assessment was reported in complete agreement as unacceptable.

Strong class I DSA (B48) was reported against donor **#003**, with mean MFI = 18668. Weak A68 and Cw8 reactivity was also reported against donor #003 by several labs. No class II DSA were reported. For the virtual T-cell crossmatch, 9 labs predict crossmatch outcome to be positive, while 1 predicts it to be negative. Virtual B-cell predictions were mixed, as 6 labs predict crossmatch outcome to be positive and 4 predict it to be negative. For renal transplant risk, 8 labs noted the risk to be unacceptable.

Against donor **#004**, several class I DSA (A30, B49, and Cw7) were reported with respective MF = 10084, 5581, and 9536. There were no class II DSA reported against this donor. The virtual T-cell crossmatch was predicted as positive by all labs. For the virtual B-cell crossmatch, 7 labs predict crossmatch outcome to be positive, while 3 predict it to be negative. A number of the labs (n = 4) predicting positive B-cell crossmatch outcomes reported class I DSA with MFI values > 10,000. The transplant risk for this donor-patient pair was assessed as being unacceptable by 9 out of 9 labs.

## Patient 2 (serum #034):

*History: Individual is a 52 year-old male being evaluated for his first transplant. The patient's HLA type is A68-A2-B61-B8-Cw7/DR17-DR14-DQ7-DQ2.*

For patient 2, only class II DSA (DR1, DR7, DQ5) were reported against **donor #001**, with mean MFI = 19765, 4219, and 20987, respectively. Complete agreement was reached for the virtual crossmatch, in which all 10 labs predict the T-cell crossmatch to be negative and all 10 predict the B-cell crossmatch to be positive. For renal transplant risk assessment, 9 labs reported it as unacceptable.

Against donor **#002**, 3 labs reported anti-B51 (890) reactivity. The remaining 7 labs reported this patient as not having class I DSA against donor #002. For class II, DQ4 (3456) reactivity against donor #002 was reported by 8 labs. Virtual T-cell predictions were reported in complete consensus as negative. For the virtual B-cell crossmatch, no agreement was reached as 6 labs predict crossmatch outcome to be positive and 4 predict it to be negative. Two of the positive predictions noted the positivity as weak, while the 1 lab predicting a negative outcome noted the crossmatch to be borderline negative. In line with the virtual B-cell predictions, no agreement was reached with the risk assessment for this donor-patient pair, as 5 labs noted the risk as acceptable and 4 noted it as unacceptable.

Against **donor #003**, only class II DSA was reported, in which labs reported strong anti-DQ6 (DQB1*06:04) reactivity with mean MFI values ranging from 10000 – 20947. Virtual T-cell predictions were all reported as negative, while virtual B-cell predictions were all reported as positive. The transplant risk for this donor patient pair was assessed as unacceptable by all reporting labs.

Against **donor #004**, no class I or class II DSA were reported against patient 2. As such, all 10 labs predict T- and B-cell crossmatch outcomes to be negative. Consequently, complete agreement was reached for the rental transplant risk for this donor-patient pair as all labs assessed the risk to be acceptable.

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## Patient 3 (serum #035):

*History: Individual is a 33-year old female being evaluated for her first transplant. The patient's HLA type is A11-A66-B27-B7-Cw3-Cw7/DR12-DR4-DR52-DR53-DQ7-DQ8. Patient has had 1 prior pregnancy. The HLA type of the child is A11-A24-B27-B62-Cw3/DR12-DR52-DQ7.*

For patient 3, no class I or class II DSA were reported against **donor #001**, with the exception of 2 labs reporting weak B64 (3308) reactivity. T– and B-cell virtual crossmatch predications were both reported as negative. One lab that noted anti-B65 reactivity against donor #001, predicts weak/borderline positivity. Complete agreement was reached for renal transplant risk, as labs assessed the risk as acceptable.

Against donor **#002**, anti-B61 reactivity was reported for this patient, with mean MFI = 11950. No class II DSA were reported. For the virtual T-cell crossmatch, 8 out 9 labs predict crossmatch outcome to be positive. The one lab predicting a negative crossmatch, reported this patient as not having DSA to donor #002. For the virtual B-cell crossmatch, no agreement was reached, as 5 labs predict crossmatch outcome to be positive and 4 predict it to be negative. All but 1 lab, reported the renal transplant risk for this donor-patient pair as unacceptable.

Against donor **#003**, anti-B48 and –B53 reactivity was reported by a number of labs (n=6), with respective mean MFI values of 6247 and 4677. No class II DSA were reported. Virtual predictions were mixed for the T-cell crossmatch, as 5 labs predict crossmatch outcome to be positive and 4 predict it to be negative. There was better agreement for the B-cell crossmatch, in which 7 labs predict the crossmatch to be negative and 2 predict it to be positive. For renal transplant risk, labs were evenly split, with 4 accessing the transplant risk as acceptable and 4 accessing it as unacceptable.

Strong anti-B49 (13736) reactivity was reported against donor **#004**. In addition, anti-B38 (3519) reactivity was reported by several labs. Only 2 labs reported the presence of class II DSA (DPB1*01:01), with MFI = 1156. Labs were in complete agreement for the virtual T-cell crossmatch, predicting the crossmatch to be positive. Virtual B-cell line crossmatch predictions were mixed, with 6 labs predicting crossmatch outcome to be positive and 3 predicting it to be negative. Transplant risk assessment was reported in complete agreement as unacceptable.

## Patient 4 (serum #036):

*History: Individual is a 59 year-old male being evaluated for his second transplant. The patient's HLA type is A2-A26-B49-B44/DR13-DR52-DQ6. The HLA typing of his first transplant is A2-A26-B49-B44/DR4-DR13-DR52-DR53-DQ8-DQ6. DP typing of previous donor is unknown.*

For patient 4, class I DSA (B27) against **donor #001** was reported, with mean MFI = 15812. Additional reactivity to B64 (1363) and Cw2 (4806) was also reported by a number of labs (n = 7). Class II DSA (DR7, DR53, DP2, and DP14) was also reported against donor #001, with MFI values ranging from 5031 to 19910. All but 1 lab, predict the virtual T-cell crossmatch to be positive. Complete agreement was achieved for the virtual B-cell crossmatch, in which labs predict crossmatch outcome to be positive. Transplant risk for this donor-patient pair was assessed as unacceptable by 9 labs.

Anti-B61 (16866) and -DP402 (9358) reactivity was reported against **donor #002** for this patient. Virtual T-cell and B-cell predictions were reported as positive by 9 out of 10. All labs were agreement for the risk assessment, reporting the renal transplant risk as unacceptable.

Against **donor #003**, labs reported class I reactivity to B48 (16907) and class II reactivity to DR53 (3464) and DP402 (9358). With exception of 1 lab that did not report DSA, labs predict the T- and B-cell crossmatch outcomes to be positive. For renal transplant risk, all but 1 lab accessed the risk as unacceptable.

Class I and class II DSA against **donor #004**, was detected in this patient. The reported DSA were B38 (3747), B49 (2575), DR53 (3959), and DP1 (5633). Nine labs predict the T-cell crossmatch for this donor-patient pair to be positive. One lab predicts weak positivity and 1 lab predicts the crossmatch to be negative. Labs were in agreement for the virtual B-cell crossmatch, predicting the outocme to be positive. For risk assessment, all labs agree the renal transplant risk is unacceptable.

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**Table 3. Individual Flow crossmatch results and DSA reported for Cell #031 vs. Serum #033**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 33 | 2.98 | 17.14 | 3.59 | | POS | A29(8943), B49(4321) | | 4.94 | 45.55 | 5.03 | | POS | no specificities assigned | | 6.61 | 11.3 | YES |
| 615 | 33 | 40 | 70 | | | POS | | | 40 | 111 | | | POS | | | | | YES |
| 792 | 33 | 52 | 228 | | | POS | A29(9295), B49(4810) | | 106 | 250 | | | POS | DR52(345) | | 212 | 278 | YES |
| 859 | 33 | 1.5 | | 2.46 | 6486 | POS | A29(10330), B49(5113) | | 1.5 | | 4.55 | 22721 | POS | no specificities assigned | | | | YES |
| 1160 | 33 | 90 | 125 | | | POS | A29(11688), B49(4637) | | 120 | 243 | | | POS | no specificities assigned | | 279 | 259 | YES |
| 2400 | 33 | 40 | 174 | | | POS | | | 80 | 112 | | | POS | No DSA | | 119 | 348 | NO |
| 3135 | 33 | 1,5 | 567 | 1,3 | | NEG | | | | | | | POS | | | 447 | | NO |
| 3224 | 33 | 70 | 104 | | | POS | A29(13503), B49(5406) | | 140 | 144 | | | POS | no specificities assigned | | 255 | 238 | YES |
| 3625 | 33 | 40 | 83 | N/a | N/A | POS | A29(7807), B49(5796) | | 40 | 88 | N/A | N/A | POS | No DSA | | 108 | 348 | NO |
| 3753 | 33 | 51 | 131 | | | POS | A29(11953), B49(7800) | | 121 | 191 | | | POS | NEG | | 228 | 253 | YES |
| 3798 | 33 | 70 | 103.5 | | 13455 | POS | A29(9688), B49(6104) | | 130 | 223.5 | | 29950 | POS | NEG | | 351 | 307 | YES |
| 3966 | 33 | 40 | 88 | | | POS | A29(10147), B49(5828) | | 100 | 75 | | | NEG | | | 81 | 311 | NO |
| 4345 | 33 | | | | | NEG | | | | | | | POS | | | | | NO |
| 4661 | 33 | 15 | 33.38 | | | POS | A29(868) | | 20 | 49.14 | | | POS | no specificities assigned | | 13.7 | 9.43 | YES |

**Table 4. Individual Flow crossmatch results and DSA reported for Cell #031 vs. Serum #034**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 34 | 2.98 | 2.53 | 1.38 | | NEG | No DSA | 4.94 | 415.2 | 37.74 | | POS | DQ6(20947) | 6.61 | 11.3 | YES |
| 615 | 34 | 40 | -5 | | | NEG | B49 | 40 | 144 | | | POS | | | | YES |
| 792 | 34 | 52 | 28 | | | NEG | B49(387) | 106 | 270 | | | POS | DQ6(21146), DQ7(1001), DR11(356) | 212 | 278 | YES |
| 859 | 34 | 1.5 | | 1.06 | 258 | NEG | No DSA | 1.5 | | 13.96 | 89722 | POS | DQ6(23248) | | | YES |
| 1160 | 34 | 90 | <0 | | | NEG | No DSA | 120 | 322 | | | POS | DQ6(24314) | 279 | 259 | YES |
| 2400 | 34 | 40 | 22 | | | NEG | No DSA | 80 | 163 | | | POS | DQ6(21555) | 119 | 348 | NO |
| 3135 | 34 | 1,5 | 439 | 1,0 | | NEG | | | | | | POS | | 447 | | NO |
| 3224 | 34 | 70 | | | | NEG | No DSA | 140 | 225 | | | POS | DQ6(21491) | 255 | 238 | YES |
| 3625 | 34 | 40 | 25 | N/A | N/A | NEG | No DSA | 40 | 195 | N/A | N/A | POS | DQ6(20992) | 108 | 348 | NO |
| 3753 | 34 | 51 | 23 | | | NEG | No DSA | 121 | 321 | | | POS | DQ6(21811) | 228 | 253 | YES |
| 3798 | 34 | 70 | -12.5 | | 3935 | NEG | No DSA | 130 | 304 | | 70293 | POS | DQ6(20800) | 351 | 307 | YES |
| 3966 | 34 | 40 | 6 | | | NEG | | 100 | 25 | | | *NEG* | | 81 | 311 | NO |
| 4345 | 34 | | | | | NEG | | | | | | POS | | | | NO |
| 4661 | 34 | 15 | 8.2 | | | NEG | no specificiies assigned | 20 | 64.14 | | | POS | DQ6(14862), DQ7(1902), DR11(536) | 13.7 | 9.43 | YES |

**Table 5. Individual Flow crossmatch results and DSA reported for Cell #031 vs. Serum #035**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 35 | 2.98 | 127.89 | 20.35 | | POS | A23(7012), B49(15084), B35(5603) | | 4.94 | 220.7 | 20.53 | | POS | no specificities assigned | | 6.61 | 11.3 | YES |
| 615 | 35 | 40 | 151 | | | POS | B49, B35 | | 40 | 203 | | | POS | | | | | YES |
| 792 | 35 | 52 | 216 | | | POS | A23(1355), B49(7039), B35(602) | | 106 | 239 | | | POS | No DSA | | 212 | 278 | YES |
| 3135 | 35 | 1,5 | 762 | 1,7 | | POS | | | | | | | POS | | | 447 | | NO |
| 3224 | 35 | 70 | 216 | | | POS | A23(4842), B49(13406), B35(3819) | | 140 | 260 | | | POS | no specificities assigned | | 255 | 238 | YES |
| 3625 | 35 | 40 | 270 | N/A | N/A | POS | A23(6286), B49(13835), B35(4950) | | 40 | 179 | N/A | N/A | POS | No DSA | | 108 | 348 | NO |
| 3753 | 35 | 51 | 360 | | | POS | A23(7639), B49(16009), B35(6581) | | 121 | 362 | | | POS | NEG | | 228 | 253 | YES |
| 3798 | 35 | 70 | 207 | | 40511 | POS | A23(3206), B49(12268) | | 130 | 318 | | 81969 | POS | NEG | | 351 | 307 | YES |
| 3966 | 35 | 40 | 180 | | | POS | | | 100 | 126 | | | POS | | | 81 | 311 | NO |
| 4345 | 35 | | | | | POS | | | | | | | POS | | | | | NO |
| 4661 | 35 | 15 | 119.71 | | | POS | no specificiies assigned | | 20 | 173.87 | | | POS | no specificities assigned | | 13.7 | 9.43 | YES |

**Table 6. Individual Flow crossmatch results and DSA reported for Cell #031 vs. Serum #036**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 36 | 2.98 | 10.44 | 2.58 | | NEG | No DSA | 4.94 | 601.2 | 54.2 | | POS | DR11(4970) | 6.61 | 11.3 | YES |
| 615 | 36 | 40 | 6 | | | NEG | B49 | 40 | 224 | | | POS | DR11, DR53 | | | YES |
| 792 | 36 | 52 | 75 | | | POS | B49(2010) | 106 | 325 | | | POS | DR11(4436), DPw3(9069), DQ7(442) | 212 | 278 | YES |
| 859 | 36 | 1.5 | | 2.03 | 4513 | POS | B49(2394) | 1.5 | | 32.64 | 234705 | POS | DR11(4563), DPw3(10206), DP402(10083) | | | YES |
| 1160 | 36 | 90 | 58 | | | NEG | B49(2957) | 120 | 425 | | | POS | DR11(4703), DPw3(9622), DP402(8231) | 279 | 259 | YES |
| 2400 | 36 | 40 | 69 | | | POS | B49(2803) | 80 | 237 | | | POS | DR11(4792), DPw3(9554) | 119 | 348 | NO |
| 3135 | 36 | 1,5 | 475 | 1,1 | | NEG | | | | | | POS | | 447 | | NO |
| 3224 | 36 | 70 | 6 | | | POS | B49(3351) | 140 | 318 | | | POS | DR11(5978), DPw3(11243), DP402(10360) | 255 | 238 | YES |
| 3625 | 36 | 40 | 69 | N/A | N/A | POS | B49(1984) | 40 | 282 | N/A | N/A | POS | DR11(3534), DPw3(6813), DP402(6085) | 108 | 348 | NO |
| 3753 | 36 | 51 | 94 | | | POS | B49(2472) | 121 | 403 | | | POS | DR11(6097), DPw3(12328), DP402(12207) | 228 | 253 | YES |
| 3798 | 36 | 70 | 31 | | 6240 | NEG | B49(2510) | 130 | 392 | | 178629 | POS | DR11(4250), DPw3(8676) | 351 | 307 | YES |
| 3966 | 36 | 40 | 26 | | | NEG | | 100 | 130 | | | POS | | 81 | 311 | NO |
| 4345 | 36 | | | | | POS | | | | | | POS | | | | NO |
| 4661 | 36 | 15 | 21.1 | | | POS | no specificiies assigned | 20 | 140.75 | | | POS | DR11(2128), DPw3(4046) | 13.7 | 9.43 | YES |

**Table 7. Individual Flow crossmatch results and DSA reported for Cell #032 vs. Serum #033**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 33 | 2.98 | 527.97 | 71.07 | | POS | A2(5870), B27(13794), B60(15700), A31(11243) | 4.94 | 553.18 | 63.72 | | POS | no specificities assigned | 7.54 | 8.82 | YES |
| 615 | 33 | 40 | 262 | | | POS | A2, B27, B60, Cw10, A31 | 40 | 295 | | | POS | | | | YES |
| 792 | 33 | 52 | 405 | | | POS | A2(4625), B27(13315), B60(15374), Cw10(11378) | 106 | 369 | | | POS | DR52(345) | 228 | 286 | YES |
| 859 | 33 | 1.5 | | 52.39 | 320376 | POS | A2(5595), B17(16416), B60(21983), Cw10(15531) | 1.5 | | 48.12 | 438560 | POS | no specificities assigned | | | YES |
| 1160 | 33 | 90 | 443 | | | POS | A2(4635), B27(14234), B60(20443), Cw10(12743) | 120 | 500 | | | POS | no specificities assigned | 304 | 276 | YES |
| 2400 | 33 | 40 | 418 | | | POS | A2(4972), B27(15139), B60(18419), Cw10(13003) | 80 | 236 | | | POS | No DSA | 125 | 374 | NO |
| 3135 | 33 | 1,5 | 3427 | 5,6 | | POS | | | | | | NT | | 610 | | NO |
| 3224 | 33 | 70 | 373 | | | POS | A2(7134), B27(15389), B60(14330), Cw10(14383) | 140 | 413 | | | POS | no specificities assigned | 255 | 238 | YES |
| 3625 | 33 | 40 | 389 | N/A | N/A | POS | A2(4096), B27(10964), B60(18289), Cw10(11137) | 40 | 284 | N/A | N/A | POS | No DSA | 144 | 344 | NO |
| 3753 | 33 | 51 | 460 | | | POS | A2(8578), B27(18604), B60(21489), Cw10(16965) | 121 | 474 | | | POS | NEG | 236 | 245 | YES |
| 3798 | 33 | 70 | 377 | | 183425 | POS | A2(5670), B27(15300), B60(15006), Cw10(13266) | 130 | 454 | | 332056 | POS | NEG | 324.5 | 303.5 | YES |
| 3966 | 33 | 40 | 283 | | | POS | | 100 | 179 | | | POS | | 81 | 336 | NO |

**Table 7. Individual Flow crossmatch results and DSA reported for Cell #032 vs. Serum #033 - cont.**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4345 | 33 | | | | | POS | | | | | | POS | | | | NO |
| 4661 | 33 | 15 | 381.97 | | | POS | A2(2530), B27(9743), B60(3610), Cw10(1288) | 20 | 632.09 | | | POS | no specificities assigned | 12.08 | 11.97 | YES |

**Table 8. Individual Flow crossmatch results and DSA reported for Cell #032 vs. Serum #034**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 34 | 2.98 | 0.97 | 1.13 | | NEG | No DSA | 4.94 | 142.18 | 17.12 | | POS | DQ6(20947) | 7.54 | 8.82 | YES |
| 615 | 34 | 40 | -16 | | | NEG | No DSA | 40 | 85 | | | POS | DQ6 | | | YES |
| 792 | 34 | 52 | 20 | | | NEG | No DSA | 106 | 213 | | | POS | DQ6(21146) | 228 | 286 | YES |
| 859 | 34 | 1.5 | | 0.95 | -247 | NEG | No DSA | 1.5 | | 8.57 | 61326 | POS | DQ6(23248) | | | YES |
| 1160 | 34 | 90 | <0 | | | NEG | No DSA | 120 | 283 | | | POS | DQ6(24314) | 304 | 276 | YES |
| 2400 | 34 | 40 | 7 | | | NEG | No DSA | 80 | 112 | | | POS | DQ6(21555) | 125 | 374 | NO |
| 3135 | 34 | 1,5 | 580 | 1,0 | | NEG | | | | | | NT | | 610 | | NO |
| 3224 | 34 | 70 | | | | NEG | No DSA | 140 | 220 | | | POS | DQ6(21491) | 255 | 238 | YES |
| 3625 | 34 | 40 | 1 | N/A | N/A | NEG | No DSA | 40 | 172 | N/A | N/A | POS | DQ6(20992) | 144 | 344 | NO |
| 3753 | 34 | 51 | 10 | | | NEG | No DSA | 121 | 289 | | | POS | DQ6(21811) | 236 | 245 | YES |
| 3798 | 34 | 70 | -21.5 | | 2687 | NEG | No DSA | 130 | 273 | | 48766 | POS | DQ6(20800) | 324.5 | 303.5 | YES |
| 3966 | 34 | 40 | 6 | | | NEG | | 100 | 0 | | | NEG | | 81 | 336 | NO |
| 4345 | 34 | | | | | NEG | | | | | | POS | | | | NO |
| 4661 | 34 | 15 | 6.73 | | | NEG | No DSA | 20 | 46.98 | | | POS | DQ6(14862) | 12.08 | 11.97 | YES |

**Table 9. Individual Flow crossmatch results and DSA reported for Cell #032 vs. Serum #035**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 35 | 2.98 | 84.67 | 12.24 | | POS | B60(14254) | 4.94 | 100.18 | 12.36 | | POS | no specificities assigned | 7.54 | 8.82 | YES |
| 615 | 35 | 40 | 121 | | | POS | B60 | 40 | 174 | | | POS | | | | YES |
| 792 | 35 | 52 | 264 | | | POS | B60(6961) | 106 | 254 | | | POS | No DSA | 228 | 286 | YES |
| 859 | 35 | 1.5 | | 9.31 | 44976 | POS | B60(13405) | 1.5 | | 11.76 | 89127 | POS | no specificities assigned | | | YES |
| 1160 | 35 | 90 | 277 | | | POS | B60(11193) | 120 | 360 | | | POS | no specificities assigned | 304 | 276 | YES |
| 2400 | 35 | 40 | 229 | | | POS | B60(11740) | 80 | 135 | | | POS | no specificities assigned | 125 | 374 | NO |
| 3135 | 35 | 1,5 | 1016 | 1,7 | | POS | | | | | | NT | | 610 | | NO |
| 3224 | 35 | 70 | 162 | | | POS | B60(11588) | 140 | 256 | | | POS | no specificities assigned | 255 | 238 | YES |
| 3625 | 35 | 40 | 207 | N/A | N/A | POS | B60(12535) | 40 | 164 | N/A | N/A | POS | no DSA | 144 | 344 | NO |
| 3753 | 35 | 51 | 274 | | | POS | BB60(15065) | 121 | 285 | | | POS | NEG | 236 | 245 | YES |
| 3798 | 35 | 70 | 230.5 | | 38829 | POS | B60(10782) | 130 | 320.5 | | 80676 | POS | NEG | 324.5 | 303.5 | YES |
| 3966 | 35 | 40 | 126 | | | POS | | 100 | 115 | | | POS | | 81 | 336 | NO |
| 4345 | 35 | | | | | POS | | | | | | POS | | | | NO |
| 4661 | 35 | 15 | 93.9 | | | POS | no specificities assigned | 20 | 198.1 | | | POS | no specificities assigned | 12.08 | 11.97 | YES |

**Table 10. Individual Flow crossmatch results and DSA reported for Cell #032 vs. Serum #036**

| Center | Serum no | T Cell Pos cutoff | T Cell MCS | RATIO | MESF | T-Cell RESULT | Class I DSA(MFI) | B Cell Pos cutoff | B-cell MCS | RATIO | MESF | B-Cell RESULT | Class II DSA(MFI) | T Cell NEG Control MC | B Cell NEG Control MC | Pronase Treated |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 36 | 2.98 | 187.97 | 25.95 | | POS | B27(15164), B60(16704) | 4.94 | 366.18 | 42.52 | | POS | DR53(5031) | 7.54 | 8.82 | YES |
| 615 | 36 | 40 | 173 | | | POS | B27,B60 | 40 | 241 | | | POS | | | | YES |
| 792 | 36 | 52 | 325 | | | POS | B27(13438), B60(14504) | 106 | 342 | | | POS | DR53(4197), DPw6(9066) | 228 | 286 | YES |
| 859 | 36 | 1.5 | | 23.12 | 128534 | POS | B27(16814), B60(19899) | 1.5 | | 35.27 | 310252 | POS | DR53(4305), DPw6(9754) | | | YES |
| 1160 | 36 | 90 | 360 | | | POS | B27(16517), B60(17710) | 120 | 459 | | | POS | DR53(2828), DPw6(9899) | 304 | 276 | YES |
| 2400 | 36 | 40 | 329 | | | POS | B27(15064), B60(15959) | 80 | 232 | | | POS | DR53(3992), DPw6(8731) | 125 | 374 | NO |
| 3135 | 36 | 1,5 | 1693 | 2,8 | | POS | | | | | | NT | | 610 | | NO |
| 3224 | 36 | 70 | 297 | | | POS | | 140 | 375 | | | POS | DR53(4712), DPw6(11312) | 255 | 238 | YES |
| 3625 | 36 | 40 | 306 | N/A | N/A | POS | B27(12045), B60(12490) | 40 | 296 | N/A | N/A | POS | DR53(2345), DPw6(7631) | 144 | 344 | NO |
| 3753 | 36 | 51 | 378 | | | POS | B27(17088), B60(18359) | 121 | 419 | | | POS | DR53(6142), DPw6(11358) | 236 | 245 | YES |
| 3798 | 36 | 70 | 320 | | 100254 | POS | B27(16500), B60(17390) | 130 | 434 | | 268631 | POS | DR53(3650), DPw6(9397) | 324.5 | 303.5 | YES |
| 3966 | 36 | 40 | 189 | | | POS | | 100 | 153 | | | POS | | 81 | 336 | NO |
| 4345 | 36 | | | | | POS | B27(15670), B60(16813) | | | | | POS | | | | NO |
| 4661 | 36 | 15 | 173.09 | | | POS | no specificities assigned | 20 | 355.45 | | | POS | DR53(1681) | 12.08 | 11.97 | YES |

# Table 11.  Summary of Single Antigen results for Serum #033

| Class I | | | | | | | |
|---|---|---|---|---|---|---|---|
| *** Serum 33 *** | | | | | | | |
| 10 typing Labs | | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| **A2** | 10 | 100% | 5284 | 5350 | 1583 | 2530 | 8578 |
| **A29** | 10 | 100% | 9918 | 9422 | 3250 | 868 | 13503 |
| A32 | 10 | 100% | 15083 | 14137 | 3549 | 5331 | 18716 |
| A33 | 10 | 100% | 10257 | 9822 | 2751 | 2420 | 12564 |
| A74 | 10 | 100% | 15295 | 14372 | 3189 | 6979 | 19065 |
| B13 | 10 | 100% | 12801 | 11880 | 4030 | 789 | 16292 |
| **B27** | 10 | 100% | 14687 | 14289 | 2429 | 9743 | 18604 |
| B41 | 10 | 100% | 16288 | 15364 | 4821 | 2143 | 20678 |
| B42 | 10 | 100% | 7366 | 240613 | 700577 | 4682 | 2342342 |
| **B60** | 10 | 100% | 16995 | 16464 | 5024 | 3610 | 21983 |
| B61 | 10 | 100% | 16584 | 16074 | 5156 | 1678 | 20857 |
| B7 | 10 | 100% | 16134 | 14992 | 3862 | 5478 | 19749 |
| B73 | 10 | 100% | 16469 | 15589 | 3544 | 6876 | 20017 |
| B45 | 9 | 90% | 8623 | 9097 | 1984 | 6953 | 13995 |
| B47 | 9 | 90% | 11110 | 11439 | 1643 | 9778 | 15089 |
| **B49** | 9 | 90% | 5406 | 5535 | 978 | 4321 | 7800 |
| B50 | 9 | 90% | 8931 | 9338 | 1792 | 7524 | 13808 |
| **Cw10** | 9 | 90% | 13003 | 12188 | 4236 | 1288 | 16965 |
| Cw16 | 9 | 90% | 8155 | 267297 | 733633 | 6330 | 2342323 |
| Cw9 | 9 | 90% | 12440 | 11250 | 4212 | 1330 | 17062 |
| A30 | 8 | 80% | 9837 | 8850 | 3016 | 1322 | 11006 |
| **A31** | 8 | 80% | 12311 | 11329 | 4018 | 2214 | 16730 |
| B46 | 8 | 80% | 4496 | 4645 | 1354 | 3157 | 7804 |
| B48 | 8 | 80% | 18675 | 17978 | 2811 | 13792 | 21389 |
| B55 | 8 | 80% | 2538 | 2437 | 562 | 1720 | 3494 |
| Cw17 | 8 | 80% | 5416 | 5601 | 1389 | 3520 | 8082 |
| **Cw2** | 8 | 80% | 3004 | 3033 | 971 | 1953 | 5070 |
| **Cw7** | 8 | 80% | 8942 | 8924 | 1498 | 6834 | 11595 |
| Cw8 | 8 | 80% | 2641 | 2715 | 626 | 2047 | 4041 |
| A66 | 7 | 70% | 6060 | 6339 | 1401 | 4021 | 8057 |
| B8 | 7 | 70% | 2071 | 2237 | 596 | 1712 | 3538 |
| B81 | 7 | 70% | 18596 | 18336 | 2126 | 15738 | 21022 |
| B67 | 6 | 60% | 1527 | 1631 | 485 | 1171 | 2655 |
| A69 | 5 | 50% | 1000 | 1047 | 504 | 547 | 1957 |
| Cw12 | 5 | 50% | 1557 | 1603 | 473 | 1059 | 2449 |
| A1 | 4 | 40% | 900 | 1214 | 669 | 709 | 2351 |
| A36 | 4 | 40% | 1345 | 1519 | 493 | 1043 | 2344 |
| B54 | 4 | 40% | 1317 | 1277 | 371 | 730 | 1746 |

| Class II | | | | | | | |
|---|---|---|---|---|---|---|---|
| *** Serum 33 *** | | | | | | | |
| 5 typing Labs | | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| DQ2 | 3 | 60% | 2879 | 2720 | 492 | 2054 | 3228 |
| NEG | 2 | - | - | - | - | - | - |

DSA present
<span style="color:red">**Red**</span>  = DSA against cell #031 only
<span style="color:blue">**Blue**</span> = DSA against cell #032 only
<span style="color:green">**Green**</span> = DSA aginst cell #031 and #032

# Table 12. Summary of Single Antigen results Serum #034

| Class I | | | | | | |
|---|---|---|---|---|---|---|
| *** Serum 34 *** | | | | | | |
| 9 typing Labs | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| B52 | 9 | 100% | 5878 | 5789 | 1154 | 4207 | 7774 |
| A32 | 4 | 44% | 962 | 966 | 368 | 596 | 1345 |
| B18 | 4 | 44% | 1002 | 954 | 262 | 606 | 1210 |
| B51 | 3 | 33% | 1020 | 970 | 274 | 612 | 1278 |

DSA present
**Red** = DSA against cell #031 only
**Blue** = DSA against cell #032 only
**Green** = DSA aginst cell #031 and #032

| Class II | | | | | | |
|---|---|---|---|---|---|---|
| *** Serum 34 *** | | | | | | |
| 10 typing Labs | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| DQ5 | 10 | 100% | 20688 | 20502 | 2512 | 14422 | 23989 |
| DQ6 | 10 | 100% | 21319 | 21116 | 2342 | 14862 | 24314 |
| DR1 | 10 | 100% | 10844 | 10217 | 2231 | 4216 | 12379 |
| DR10 | 10 | 100% | 13041 | 12300 | 2767 | 5559 | 16091 |
| DR15 | 10 | 100% | 14007 | 13484 | 2874 | 6523 | 16658 |
| DR16 | 10 | 100% | 13302 | 12894 | 2900 | 6628 | 17026 |
| DR51 | 10 | 100% | 17777 | 16994 | 2931 | 9537 | 20517 |
| DR9 | 10 | 100% | 19223 | 18272 | 3048 | 9868 | 21008 |
| DQ4 | 9 | 90% | 4000 | 4213 | 1367 | 1086 | 5910 |
| DR103 | 9 | 90% | 5849 | 6371 | 1333 | 4098 | 8876 |
| DR7 | 9 | 90% | 4058 | 3735 | 1315 | 1175 | 5537 |
| DQ7 | 3 | 30% | 1902 | 2500 | 1529 | 1001 | 4599 |
| DR11 | 2 | 20% | 446 | 446 | 90 | 356 | 536 |

# Table 13.  Summary of Single Antigen results Serum #035

| Class I | | | | | | | |
|---|---|---|---|---|---|---|---|
| *** Serum 35 *** | | | | | | | |
| 9 typing Labs | | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| A1 | 9 | 100% | 6551 | 6541 | 2062 | 2558 | 9455 |
| A23 | 9 | 100% | 4842 | 4824 | 1935 | 1355 | 7639 |
| B13 | 9 | 100% | 11288 | 11305 | 2222 | 6335 | 13822 |
| B41 | 9 | 100% | 12960 | 13164 | 2229 | 8154 | 16096 |
| B44 | 9 | 100% | 15579 | 15465 | 2137 | 10735 | 18371 |
| B45 | 9 | 100% | 16371 | 16859 | 2552 | 11619 | 20708 |
| B47 | 9 | 100% | 10450 | 10598 | 2212 | 5682 | 13426 |
| B49 | 9 | 100% | 13406 | 13050 | 2557 | 7039 | 16009 |
| B50 | 9 | 100% | 12594 | 12595 | 2382 | 7222 | 15524 |
| B60 | 9 | 100% | 11740 | 11947 | 2223 | 6961 | 15065 |
| B61 | 9 | 100% | 11744 | 11482 | 2128 | 6733 | 14229 |
| B71 | 9 | 100% | 5434 | 4573 | 1767 | 1087 | 6915 |
| B72 | 9 | 100% | 5765 | 5342 | 1793 | 1903 | 8082 |
| B76 | 9 | 100% | 13122 | 13269 | 2390 | 8430 | 16614 |
| A24 | 8 | 89% | 3565 | 3926 | 1749 | 1106 | 6296 |
| B48 | 8 | 89% | 4145 | 3939 | 1968 | 725 | 6729 |
| B62 | 8 | 89% | 4309 | 4114 | 1795 | 1130 | 6789 |
| B82 | 8 | 89% | 10240 | 9265 | 2357 | 4851 | 11834 |
| B35 | 7 | 78% | 4916 | 4050 | 1964 | 602 | 6581 |
| B18 | 6 | 67% | 4522 | 4390 | 1471 | 1723 | 6131 |
| B53 | 6 | 67% | 4095 | 3599 | 1330 | 1131 | 5121 |
| B75 | 6 | 67% | 4216 | 3741 | 1456 | 1002 | 5595 |
| B39 | 5 | 56% | 3624 | 3327 | 1364 | 1114 | 5300 |
| B37 | 4 | 44% | 2048 | 2203 | 705 | 1392 | 3324 |
| B38 | 3 | 33% | 3358 | 3042 | 630 | 2163 | 3607 |
| B51 | 3 | 33% | 2378 | 2165 | 667 | 1263 | 2855 |
| B59 | 3 | 33% | 2588 | 2352 | 723 | 1372 | 3096 |
| B64 | 3 | 33% | 2082 | 1899 | 672 | 1000 | 2615 |
| B77 | 3 | 33% | 2617 | 2188 | 638 | 1287 | 2661 |
| B78 | 3 | 33% | 3991 | 3526 | 1739 | 1203 | 5386 |
| B52 | 2 | 22% | 1373 | 1373 | 338 | 1035 | 1711 |
| B7801 | 2 | 22% | 3414 | 3413 | 475 | 2939 | 3888 |
| B8 | 2 | 22% | 1550 | 1550 | 66 | 1484 | 1616 |

| Class II | | | | | | | |
|---|---|---|---|---|---|---|---|
| *** Serum 35 *** | | | | | | | |
| 4 typing Labs | | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| DPw1 | 2 | 50% | 1605 | 1604 | 220 | 1385 | 1824 |
| DPw5 | 2 | 50% | 1288 | 1287 | 179 | 1109 | 1466 |
| NEG | 2 | 50% | - | - | - | - | - |

DSA present
Red = DSA against cell #031 only
Blue = DSA against cell #032 only
Green = DSA aginst cell #031 and #032

# Table 14. Summary of Single Antigen results Serum #036

| Class I | | | | | | | |
|---|---|---|---|---|---|---|---|
| *** Serum 36 *** | | | | | | | |
| 9 typing Labs | | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| B13 | 9 | 100% | 22126 | 21329 | 1398 | 19503 | 23254 |
| **B27** | 9 | 100% | 15670 | 15366 | 1586 | 12045 | 17088 |
| B38 | 9 | 100% | 3794 | 3683 | 653 | 2216 | 4407 |
| B41 | 9 | 100% | 6458 | 6249 | 804 | 4499 | 7099 |
| B42 | 9 | 100% | 5259 | 5146 | 799 | 3606 | 6498 |
| B47 | 9 | 100% | 12863 | 12295 | 1567 | 8910 | 13921 |
| B48 | 9 | 100% | 16790 | 16348 | 2007 | 11983 | 18781 |
| B50 | 9 | 100% | 3032 | 2848 | 534 | 1872 | 3560 |
| B55 | 9 | 100% | 4347 | 4291 | 705 | 3111 | 5670 |
| **B60** | 9 | 100% | 16813 | 16647 | 2043 | 12490 | 19899 |
| B61 | 9 | 100% | 16000 | 16080 | 1801 | 12574 | 19191 |
| B62 | 9 | 100% | 5220 | 5123 | 733 | 3838 | 6346 |
| B67 | 9 | 100% | 7515 | 7106 | 1001 | 4936 | 8409 |
| B7 | 9 | 100% | 18370 | 17501 | 1970 | 13185 | 19221 |
| B71 | 9 | 100% | 2826 | 2866 | 475 | 2040 | 3628 |
| B73 | 9 | 100% | 12884 | 12194 | 1802 | 8294 | 14465 |
| B75 | 9 | 100% | 3879 | 3681 | 652 | 2513 | 4865 |
| B76 | 9 | 100% | 3297 | 3216 | 549 | 2041 | 3946 |
| B8 | 9 | 100% | 4877 | 4901 | 804 | 3273 | 5978 |
| B39 | 8 | 89% | 5407 | 5190 | 852 | 3365 | 5974 |
| **B49** | 8 | 89% | 2491 | 2560 | 435 | 1984 | 3351 |
| B52 | 8 | 89% | 2857 | 2743 | 386 | 2038 | 3357 |
| B72 | 8 | 89% | 3261 | 3285 | 556 | 2483 | 4211 |
| **Cw2** | 8 | 89% | 5016 | 4794 | 1092 | 2947 | 6379 |
| B37 | 7 | 78% | 2028 | 1944 | 556 | 1162 | 2629 |
| B54 | 7 | 78% | 2139 | 2099 | 340 | 1610 | 2682 |
| B56 | 7 | 78% | 2558 | 2557 | 506 | 1857 | 3479 |
| B59 | 7 | 78% | 2094 | 1988 | 332 | 1467 | 2517 |
| B77 | 7 | 78% | 2305 | 2350 | 410 | 1754 | 2914 |
| B81 | 7 | 78% | 16776 | 16425 | 1343 | 13563 | 17669 |
| Cw17 | 7 | 78% | 2326 | 2078 | 625 | 1143 | 3012 |
| B18 | 6 | 67% | 1860 | 1783 | 361 | 1238 | 2356 |
| **B35** | 6 | 67% | 1753 | 1607 | 453 | 814 | 2197 |
| B45 | 6 | 67% | 1744 | 1620 | 402 | 940 | 2083 |
| B64 | 6 | 67% | 1412 | 1308 | 311 | 737 | 1664 |
| B65 | 6 | 67% | 1195 | 1157 | 244 | 777 | 1471 |
| A66 | 5 | 56% | 3812 | 3310 | 692 | 2281 | 3938 |
| B78 | 5 | 56% | 1102 | 1009 | 234 | 645 | 1254 |

| Class II | | | | | | | |
|---|---|---|---|---|---|---|---|
| *** Serum 36 *** | | | | | | | |
| 10 typing Labs | | | | | | | |
| Antigen | No.Labs | Consensus | Median | Mean | Std Dev | Min | Max |
| **DR11** | 10 | 100% | 4633 | 4545 | 1081 | 2128 | 6097 |
| **DR53** | 10 | 100% | 4095 | 3888 | 1256 | 1681 | 6142 |
| DR7 | 10 | 100% | 14990 | 14630 | 3395 | 7441 | 19910 |
| DP13 | 9 | 90% | 4553 | 4694 | 1103 | 2638 | 6226 |
| DP14 | 9 | 90% | 9055 | 9025 | 2125 | 4479 | 12293 |
| DP17 | 9 | 90% | 8209 | 8274 | 1975 | 4800 | 12106 |
| DP18 | 9 | 90% | 9919 | 9195 | 2454 | 3619 | 12411 |
| DP19 | 9 | 90% | 4532 | 4358 | 1213 | 2194 | 6589 |
| DP28 | 9 | 90% | 7567 | 7121 | 1657 | 4032 | 9392 |
| DPw1 | 9 | 90% | 5378 | 5205 | 1271 | 2620 | 7706 |
| DPw2 | 9 | 90% | 8386 | 8226 | 1987 | 4081 | 11039 |
| **DPw3** | 9 | 90% | 9554 | 9061 | 2301 | 4046 | 12328 |
| DR9 | 9 | 90% | 3009 | 2821 | 859 | 1270 | 4185 |
| DP10 | 8 | 80% | 9615 | 9654 | 2455 | 5872 | 14219 |
| DP11 | 8 | 80% | 5382 | 5328 | 1241 | 3394 | 7494 |
| DP20 | 8 | 80% | 9731 | 9874 | 1405 | 7566 | 12520 |
| DP9 | 8 | 80% | 10318 | 10408 | 1523 | 7590 | 12932 |
| DPw5 | 8 | 80% | 6180 | 6114 | 1671 | 2689 | 8100 |
| **DPw6** | 8 | 80% | 9576 | 9643 | 1177 | 7631 | 11358 |
| **DP402** | 5 | 50% | 10083 | 9393 | 2080 | 6085 | 12207 |
| DPw4 | 4 | 40% | 8411 | 7638 | 1868 | 4475 | 9255 |
| DP15 | 3 | 30% | 729 | 728 | 151 | 544 | 913 |

DSA present
**Red** = DSA against cell #031 only
**Blue** = DSA against cell #032 only
**Green** = DSA aginst cell #031 and #032

## Table 15a.  Individual laboratory results for Serum #033 - class I by Luminex

| Center | A2 | A29 | A32 | A33 | A74 | B13 | B27 | B41 | B42 | B60 | B61 | B7 | B73 | B45 | B47 | B49 | B50 | Cw10 | Cw16 | Cw9 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 5870 | 8943 | 15206 | 9524 | 15339 | 10970 | 13794 | 14486 | 4682 | 15700 | 15671 | 13501 | 16235 | 7318 | 9833 | 4321 | 7706 | | | | B48,A31,B81 | One Lambda |
| 792 | 4525 | 9295 | 13719 | 9292 | 13505 | 12063 | 13315 | 15227 | 6092 | 15374 | 15945 | 14153 | 14630 | 8200 | 9778 | 4810 | 8510 | 11378 | 6330 | 10236 | B48,A66,B62> | One Lambda |
| 859 | 5595 | 10330 | 16668 | 9914 | 16005 | 14993 | 16416 | 19221 | 6369 | 21983 | 20702 | 18673 | 18694 | 9788 | 12481 | 5113 | 9883 | 15531 | 8155 | 14957 | B48,A66,B55> | One Lambda |
| 1160 | 4535 | 11688 | 15890 | 12066 | 16134 | 13113 | 14234 | 17727 | 8050 | 20443 | 19172 | 15980 | 17315 | 6953 | 10611 | 4637 | 7524 | 12743 | 7834 | 10112 | B48,A66,B55> | One Lambda |
| 2400 | 4972 | 10147 | 14959 | 10784 | 15251 | 12489 | 15139 | 17516 | 8508 | 18419 | 18012 | 16288 | 17094 | 8623 | 11713 | 5828 | 9037 | 13003 | 8232 | 12440 | B48,A66,B55> | One Lambda |
| 3224 | 7134 | 13503 | 14882 | 12180 | 15209 | 13592 | 15389 | 16026 | 7422 | 14330 | 16592 | 17100 | 16236 | 8737 | 11110 | 5406 | 8931 | 14383 | 8345 | 12806 | B48,B54,B55> | |
| 3625 | 4096 | 7807 | 10472 | 8877 | 10578 | 10785 | 10964 | 14067 | 7310 | 18289 | 15543 | 12060 | 12095 | 8121 | 9841 | 5796 | 8390 | 11137 | 6659 | 9209 | B48,A66,B62> | One Lambda |
| 3753 | 8578 | 11953 | 18716 | 12564 | 19065 | 16292 | 18604 | 20678 | 8517 | 21489 | 20857 | 19749 | 20017 | 13995 | 15089 | 7800 | 13808 | 16965 | 9989 | 17062 | B48,B54,B55> | One Lambda |
| 3798 | 5670 | 9688 | 15534 | 10600 | 15661 | 13716 | 15300 | 16549 | 6842 | 15006 | 16576 | 16941 | 16702 | 10140 | 12499 | 6104 | 10256 | 13266 | 7813 | 13102 | A66,B55,A30> | One Lambda |
| 4661 | 2530 | 868 | 5331 | 2420 | 6979 | 789 | 9743 | 2143 | | 3610 | 1678 | 5478 | 6876 | | | | | 1288 | | 1330 | A66,B703,A30> | Lifecodes |
| Avg | 5351 | 9422 | 14138 | 9822 | 14373 | 11880 | 14290 | 15364 | 7088 | 16464 | 16075 | 14992 | 15589 | 9097 | 11439 | 5535 | 9338 | 12188 | 7920 | 11250 | | |
| Std Dev | 1583 | 3250 | 3549 | 2751 | 3189 | 4030 | 2429 | 4821 | 1179 | 5024 | 5156 | 3862 | 3544 | 1984 | 1643 | 978 | 1792 | 4236 | 1046 | 4212 | | |
| MFI %CV | 30% | 34% | 25% | 28% | 22% | 34% | 17% | 31% | 17% | 31% | 32% | 26% | 23% | 22% | 14% | 18% | 19% | 35% | 13% | 37% | | |

## Table 15b.  Individual laboratory results for Serum #033 - class I by Flow PRA

| Center | A2 | A29 | A32 | A33 | B13 | B27 | B41 | B42 | B60 | B61 | B7 | B73 | B45 | B47 | B49 | B50 | Cw10 | Cw16 | Cw9 | A30 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 615 | 421 | 499 | 555 | 502 | 358 | 371 | 596 | 424 | 610 | 617 | 397 | 511 | 400 | 483 | 306 | 446 | 446 | 296 | 367 | 519 | A31,B46,B48> | One Lambda |

DSA present

Red  = DSA against cell #031 only

Blue = DSA against cell #032 only

Green = DSA aginst cell #031 and #032

# Table 16a.  Individual laboratory results for Serum #034 - class I by Luminex

| Center | B52 | A32 | B18 | B51 | | | | Other | Vendor | |
|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 5892 | | | | | | | | One Lambda | |
| 792 | 4967 | 596 | 797 | 612 | | | | **B49**,A25,B59 | One Lambda | |
| 859 | 4772 | 1345 | | | | | | | One Lambda | |
| 1160 | 4755 | | | | | | | | One Lambda | |
| 2400 | 5878 | | | | | | | | One Lambda | |
| 3224 | 7187 | | 1206 | 1020 | | | | | One Lambda | |
| 3625 | 4207 | 601 | 606 | | | | | B67 | One Lambda | |
| 3753 | 7774 | 1323 | 1210 | 1278 | | | | | One Lambda | |
| 3798 | 6675 | | | | | | | | One Lambda | |
| 4661 | | | | | | | | | Lifecodes | |
| Avg | 5790 | 966 | 955 | 970 | | | | | | |
| Std Dev | 1154 | 368 | 262 | 274 | | | | | | |
| MFI %CV | 20% | 38% | 27% | 28% | | | | | | |

# Table 16b.  Individual laboratory results for Serum #034 - class I by Flow PRA

| Center | B52 | A32 | B18 | B51 | A25 | **B49** | B59 | B67 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|
| 615 | 210 | 141 | 187 | 71 | 124 | 105 | 159 | 64 | Cw4,Cw6,A11,A24 > | One Lambda |

DSA present

**Red** = DSA against cell #031 only

**Blue** = DSA against cell #032 only

**Green** = DSA aginst cell #031 and #032

## Table 17a.  Individual laboratory results for Serum #035 - class I by Luminex

| Center | A1 | A23 | B13 | B41 | B44 | B45 | B47 | B49 | B50 | B60 | B61 | B71 | B72 | B76 | A24 | B48 | B62 | B82 | B35 | B18 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 8763 | 7012 | 13670 | 15384 | 16647 | 18584 | 13176 | 15084 | 15071 | 14254 | 13470 | 5649 | 6907 | 15756 | 6053 | 6161 | 5797 | 11218 | 5603 | 5835 | B53,B75 | One Lambda |
| 792 | 2558 | 1355 | 6335 | 8154 | 10735 | 11619 | 5682 | 7039 | 7222 | 6961 | 6733 | 1087 | 1903 | 8430 | 1106 | 725 | 1130 | 4851 | 602 | | | One Lambda |
| 859 | 7453 | 4225 | 13495 | 15199 | 18371 | 20708 | 12239 | 15571 | 14529 | 13405 | 13405 | 5660 | 6212 | 15708 | 2829 | 5071 | 4749 | 11145 | 4916 | 4747 | B78,B51,B52,B53 > | One Lambda |
| 1160 | 4474 | 3102 | 9971 | 12203 | 15002 | 15800 | 9411 | 11688 | 11306 | 11193 | 10774 | 2967 | 3838 | 11584 | 2695 | 2022 | 2631 | 7054 | 1884 | 1723 | B78,B53,B75,B39 > | One Lambda |
| 2400 | 6506 | 5756 | 11288 | 12960 | 15579 | 16371 | 10275 | 12558 | 12078 | 11740 | 11017 | 5434 | 5765 | 13122 | 5389 | | | 9455 | | | | One Lambda |
| 3224 | 6551 | 4842 | 10961 | 12800 | 15490 | 15774 | 10450 | 13406 | 12594 | 11588 | 11915 | 4569 | 5320 | 12405 | 4301 | 3488 | 3868 | | 3819 | 3609 | B51,B53,B75,B64 > | |
| 3625 | 7947 | 6286 | 11819 | 13401 | 16240 | 17141 | 11027 | 13835 | 13468 | 12535 | 11744 | 5985 | 6401 | 13525 | 6296 | 4802 | 5419 | 11025 | 4950 | 4297 | A66,B51,B52,B53 > | One Lambda |
| 3753 | 9455 | 7639 | 13822 | 16096 | 17568 | 19957 | 13426 | 16009 | 15524 | 15065 | 14229 | 6915 | 8082 | 16614 | | 6729 | 6789 | 11834 | 6581 | 6131 | B78,B53,B75,B39 | One Lambda |
| 3798 | 5164 | 3206 | 10385 | 12281 | 13554 | 15777 | 9704 | 12268 | 11567 | 10782 | 10057 | 2895 | 3656 | 12281 | 2746 | 2515 | 2530 | 7538 | | | | One Lambda |
| 4661 | | | | | | | | | | | | | | | | | | | | | | Lifecodes |
| Avg | 6541 | 4825 | 11305 | 13164 | 15465 | 16859 | 10599 | 13051 | 12595 | 11947 | 11483 | 4573 | 5343 | 13269 | 3927 | 3939 | 4114 | 9265 | 4051 | 4390 | | |
| Std Dev | 2062 | 1935 | 2222 | 2229 | 2137 | 2552 | 2212 | 2557 | 2382 | 2223 | 2128 | 1767 | 1793 | 2390 | 1749 | 1968 | 1795 | 2357 | 1964 | 1471 | | |
| MFI %CV | 32% | 40% | 20% | 17% | 14% | 15% | 21% | 20% | 19% | 19% | 19% | 39% | 34% | 18% | 45% | 50% | 44% | 25% | 48% | 33% | | |

## Table 17b.  Individual laboratory results for Serum #035 - class I by Flow PRA

| Center | A1 | A23 | B13 | B41 | B44 | B45 | B47 | B49 | B50 | B60 | B61 | B72 | B76 | A24 | B48 | B62 | B71 | B35 | B82 | B18 | B53 | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 615 | 282 | 385 | 409 | 549 | 505 | 551 | 496 | 485 | 522 | 499 | 277 | 436 | 541 | 356 | 387 | 391 | | 279 | | 352 | B53,B75,B39,B37> | One Lambda |

DSA present
Red  = DSA against cell #031 only
Blue = DSA against cell #032 only
Green = DSA aginst cell #031 and #032

# Table 18a.  Individual laboratory results for Serum #036 - class I by Luminex

| Center | B13 | B27 | B38 | B41 | B42 | B47 | B48 | B50 | B55 | B60 | B61 | B62 | B67 | B7 | B71 | B73 | B75 | B76 | B8 | B39 | B49 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 19618 | 15164 | 3794 | 6458 | 5658 | 13193 | 17914 | 3472 | 4376 | 16704 | 15535 | 5595 | 7153 | 18712 | 3328 | 12919 | 4106 | 3773 | 4877 | 5866 | | B81 | One Lambda |
| 792 | 19503 | 13438 | 3168 | 5178 | 4212 | 10276 | 13951 | 2214 | 3377 | 14504 | 14500 | 3993 | 5847 | 14982 | 2223 | 10200 | 3087 | 2665 | 4345 | 4453 | 2010 | A66,B78,B52 > | One Lambda |
| 859 | 22126 | 16814 | 4380 | 6836 | 5259 | 13921 | 18781 | 3032 | 4488 | 19899 | 19191 | 5161 | 7685 | 19221 | 2795 | 14465 | 3946 | 3037 | 4656 | 5974 | 2394 | B78,B52,B82 > | One Lambda |
| 1160 | 23254 | 16517 | 3408 | 6733 | 5686 | 12863 | 16790 | 3173 | 4811 | 17710 | 17428 | 5468 | 7649 | 18767 | 3205 | 13073 | 3879 | 3416 | 4366 | 5084 | 2957 | A66,B78,B52 > | One Lambda |
| 2400 | 22267 | 15064 | 3609 | 6307 | 4900 | 12026 | 16481 | 2547 | 4156 | 15959 | 15326 | 5220 | 7199 | 17038 | 2970 | 11516 | 3329 | 3236 | 5774 | 5138 | 2803 | A66,B52,B54 > | One Lambda |
| 3224 | 20087 | 15670 | 4083 | 7099 | 6498 | 12658 | 16171 | 3560 | 5670 | 16813 | 17124 | 6346 | 8409 | 18370 | 3628 | 12884 | 4865 | 3297 | 5978 | | 3351 | B52,B45,B54> | One Lambda |
| 3625 | 20052 | 12045 | 2216 | 4499 | 3606 | 8910 | 11983 | 1872 | 3111 | 12490 | 12574 | 3838 | 4936 | 13185 | 2040 | 8294 | 2513 | 2041 | 3273 | 3365 | 1984 | A66,B78,B52 > | One Lambda |
| 3753 | 22354 | 17088 | 4407 | 6403 | 5353 | 13658 | 17647 | 3086 | 4347 | 18359 | 17048 | 5360 | 7568 | 19099 | 2782 | 13766 | 3324 | 3946 | 5571 | 5969 | 2472 | B78,B52,B82 > | One Lambda |
| 3798 | 22700 | 16500 | 4085 | 6731 | 5145 | 13150 | 17418 | 2682 | 4288 | 17390 | 16000 | 5130 | 7515 | 18137 | 2826 | 12632 | 4083 | 3536 | 5269 | 5675 | 2510 | A66,B52,B77 > | One Lambda |
| 4661 | | | | | | | | | | | | | | | | | | | | | | | Lifecodes |
| Avg | 21329 | 15367 | 3683 | 6249 | 5146 | 12295 | 16348 | 2849 | 4292 | 16648 | 16081 | 5123 | 7107 | 17501 | 2866 | 12194 | 3681 | 3216 | 4901 | 5191 | 2560 | | |
| Std Dev | 1398 | 1586 | 653 | 804 | 799 | 1567 | 2007 | 534 | 705 | 2043 | 1801 | 733 | 1001 | 1970 | 475 | 1802 | 652 | 549 | 804 | 852 | 435 | | |
| MFI %CV | 7% | 10% | 18% | 13% | 16% | 13% | 12% | 19% | 16% | 12% | 11% | 14% | 14% | 11% | 17% | 15% | 18% | 17% | 16% | 16% | 17% | | |

# Table 18b.  Individual laboratory results for Serum #036 - class I by Flow PRA

| Center | B13 | B27 | B38 | B41 | B42 | B47 | B48 | B50 | B55 | B60 | B61 | B62 | B67 | B7 | B73 | B75 | B76 | B8 | B39 | B49 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 615 | 534 | 391 | 59 | 402 | 359 | 486 | 550 | 281 | 218 | 540 | 591 | 392 | 306 | 427 | 450 | 332 | 329 | 251 | 456 | 254 | B52,B71> | One Lambda |

DSA present
Red  = DSA against cell #031 only
Blue = DSA against cell #032 only
Green = DSA aginst cell #031 and #032

## Table 19a.  Individual laboratory results for Serum #033 - class II by Luminex

| Center | DQ2 | | | Other | Vendor |
|---|---|---|---|---|---|
| 206 | | | | | One Lambda |
| 792 | 2054 | | | **DR52**,DP14 | One Lambda |
| 859 | | | | | One Lambda |
| 1160 | | | | | One Lambda |
| 2400 | 2879 | | | | One Lambda |
| 3224 | | | | | |
| 3625 | 3228 | | | DR10,DPW1 | One Lambda |
| 3753 | NEG | | | | One Lambda |
| 3798 | NEG | | | | One Lambda |
| 4661 | | | | | Lifecodes |
| Avg | 2720 | | | | |
| Std Dev | 492 | | | | |
| MFI %CV | 18% | | | | |

## Table 19b.  Individual laboratory results for Serum #033 class II by Flow PRA

| Center | DQ2 | DR10 | **DR52** | Other | Vendor |
|---|---|---|---|---|---|
| 615 | 16 | 73 | 56 | DR1,DR103,**DR4**,DR7 > | One Lambda |

DSA present
**Red**  = DSA against cell #031 only
**Blue** = DSA against cell #032 only
**Green** = DSA aginst cell #031 and #032

## Table 20a. Individual laboratory results for Serum #034 - class II by Luminex

| Center | DQ5 | DQ6 | DR1 | DR10 | DR15 | DR16 | DR51 | DR9 | DQ4 | DR103 | DR7 | DQ7 | DR11 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 18910 | 20947 | 9838 | 13424 | 12060 | 12616 | 17791 | 18723 | | 4098 | 4360 | | | | One Lambda |
| 792 | 22025 | 21146 | 10975 | 12395 | 13602 | 14421 | 17127 | 18417 | 5418 | 7246 | 3841 | 1001 | 356 | DQ2 | One Lambda |
| 859 | 23009 | 23248 | 10713 | 13164 | 12866 | 13259 | 19902 | 20519 | 3656 | 5723 | 4058 | | | | One Lambda |
| 1160 | 23989 | 24314 | 9550 | 10976 | 14412 | 11561 | 16680 | 18939 | 4000 | 5409 | 2717 | | | | One Lambda |
| 2400 | 19395 | 21555 | 11744 | 12918 | 15153 | 16293 | 18088 | 19784 | 4891 | 8876 | 4451 | | | | One Lambda |
| 3224 | 21649 | 21491 | 11533 | 13878 | 16658 | 13345 | 17763 | 19571 | 5910 | 7714 | 5102 | | | | One Lambda |
| 3625 | 20961 | 20992 | 9328 | 10052 | 11397 | 9698 | 14561 | 16389 | 5407 | 5849 | 2378 | | | | One Lambda |
| 3753 | 20415 | 21811 | 12379 | 16091 | 16321 | 17026 | 20517 | 21008 | 3580 | 6606 | 5537 | | | | One Lambda |
| 3798 | 20248 | 20800 | 11895 | 14549 | 15854 | 14100 | 17979 | 19507 | 3969 | 5824 | | 4599 | | | One Lambda |
| 4661 | 14422 | 14862 | 4216 | 5559 | 6523 | 6628 | 9537 | 9868 | 1086 | | 1175 | 1902 | 536 | | Lifecodes |
| Avg | 20502 | 21117 | 10217 | 12301 | 13485 | 12895 | 16995 | 18273 | 4213 | 6372 | 3735 | 2501 | 446 | | |
| Std Dev | 2512 | 2342 | 2231 | 2767 | 2874 | 2900 | 2931 | 3048 | 1367 | 1333 | 1315 | 1529 | 90 | | |
| MFI %CV | 12% | 11% | 22% | 22% | 21% | 22% | 17% | 17% | 32% | 21% | 35% | 61% | 20% | | |

## Table 20b. Individual laboratory results for Serum #034 - class II by Flow PRA

| Center | DQ5 | DQ6 | DR1 | DR10 | DR15 | DR16 | DR51 | DR9 | DR103 | DR7 | DQ4 | DQ7 | DR11 | DQ2 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 615 | 628 | 470 | 415 | 574 | 521 | 485 | 391 | 503 | 547 | 362 | | 103 | 118 | 26 | DR4,DR8,DR12,DR13 > | One Lambda |

DSA present

**Red** = DSA against cell #031 only

**Blue** = DSA against cell #032 only

**Green** = DSA aginst cell #031 and #032

## Table 21a.  Individual laboratory results for Serum #035 - class II by Luminex

| Center | DPW1 | DPW5 | Other | Vendor |
|---|---|---|---|---|
| 206 | | | | One Lambda |
| 792 | 1385 | 1466 | | One Lambda |
| 859 | | | | One Lambda |
| 1160 | | | | One Lambda |
| 2400 | | | | One Lambda |
| 3224 | | | | |
| 3625 | 1824 | 1109 | | One Lambda |
| 3753 | NEG | | | One Lambda |
| 3798 | NEG | | | One Lambda |
| 4661 | | | | Lifecodes |
| | | | | |
| Avg | 1605 | 1288 | | |
| Std Dev | 220 | 179 | | |
| MFI %CV | 14% | 14% | | |

## Table 21b.  Individual laboratory results for Serum #035 - class II by Flow PRA

| Center | DPW1 | DPW5 | Other | Vendor |
|---|---|---|---|---|
| 615 | | | DR1,DR103,**DR4**,DR7 > | One Lambda |

DSA present
**Red**  = DSA against cell #031 only
**Blue** = DSA against cell #032 only
**Green** = DSA aginst cell #031 and #032

# Table 22a.  Individual laboratory results for Serum #036 - class II by Luminex

| Center | DR11 | DR53 | DR7 | DP13 | DP14 | DP17 | DP18 | DP19 | DP28 | DPW1 | DPW2 | DPW3 | DR9 | DP10 | DP11 | DP20 | DP9 | DPW5 | DPW6 | DP402 | DPW4 | DP15 | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 206 | 4970 | 5031 | 17279 | | | | | | | | | | | | | | | | | | | | | One Lambda |
| 792 | 4436 | 4197 | 14291 | 5374 | 9047 | 8797 | 9919 | 4532 | 7567 | 5093 | 8090 | 9069 | 3009 | 10084 | 5397 | 8873 | 9556 | 6024 | 9066 | | 8677 | 729 | DR10,DQ7> | One Lambda |
| 859 | 4563 | 4305 | 17473 | 5569 | 10102 | 9657 | 11108 | 5130 | 8815 | 5673 | 9527 | 10206 | 3056 | 11052 | 6038 | 9855 | 10606 | 7090 | 9754 | 10083 | | | | One Lambda |
| 1160 | 4703 | 2828 | 13407 | 4553 | 9055 | 7889 | 10304 | 4032 | 7135 | 5378 | 8431 | 9622 | 2156 | 7956 | 4581 | 9607 | 10030 | 6336 | 9899 | 8231 | | | | One Lambda |
| 2400 | 4792 | 3992 | 15992 | 4322 | 9954 | 8209 | 8266 | 4800 | 7649 | 5451 | 8016 | 9554 | 2883 | 11419 | 5367 | 10056 | 10926 | 5966 | 8731 | | 9255 | | | One Lambda |
| 3224 | 5978 | 4712 | 15190 | 5738 | 10580 | 9278 | 12411 | 4957 | 8397 | 5618 | 10309 | 11243 | 3764 | 9145 | 6357 | 11274 | 11981 | 8014 | 11312 | 10360 | | 913 | | One Lambda |
| 3625 | 3534 | 2345 | 10531 | 3330 | 6829 | 6142 | 8100 | 2859 | 5310 | 4157 | 6159 | 6813 | 1909 | 5872 | 3394 | 7566 | 7590 | 4697 | 7631 | 6085 | | 544 | | One Lambda |
| 3753 | 6097 | 6142 | 19910 | 6226 | 12293 | 12106 | 11113 | 6589 | 9392 | 7706 | 11039 | 12328 | 4185 | 14219 | 7494 | 12520 | 12932 | 8100 | 11358 | 12207 | | | | One Lambda |
| 3798 | 4250 | 3650 | 14789 | 4500 | 8893 | 7595 | 7921 | 4136 | 5800 | 5150 | 8386 | 8676 | 3158 | 7489 | 4000 | 9246 | 9644 | | 9397 | | 8145 | | | One Lambda |
| 4661 | 2128 | 1681 | 7441 | 2638 | 4479 | 4800 | 3619 | 2194 | 4032 | 2620 | 4081 | 4046 | 1270 | | | | | 2689 | | | 4475 | | | Lifecodes |
| Avg | 4545 | 3888 | 14630 | 4694 | 9026 | 8275 | 9196 | 4359 | 7122 | 5205 | 8226 | 9062 | 2821 | 9655 | 5329 | 9875 | 10408 | 6115 | 9644 | 9393 | 7638 | 729 | | |
| Std Dev | 1081 | 1256 | 3395 | 1103 | 2125 | 1975 | 2454 | 1213 | 1657 | 1271 | 1987 | 2301 | 859 | 2455 | 1241 | 1405 | 1523 | 1671 | 1177 | 2080 | 1868 | 151 | | |
| MFI %CV | 24% | 32% | 23% | 23% | 24% | 24% | 27% | 28% | 23% | 24% | 24% | 25% | 30% | 25% | 23% | 14% | 15% | 27% | 12% | 22% | 24% | 21% | | |

# Table 22b.  Individual laboratory results for Serum #036 - class II by Flow PRA

| Center | DR11 | DR53 | DR7 | DR9 | DR10 | | | | | | | | | | | Other | Vendor |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 615 | 415 | 362 | 523 | 222 | 173 | | | | | | | | | | | | One Lambda |

DSA present
Red  = DSA against cell #031 only
Blue = DSA against cell #032 only
Green = DSA aginst cell #031 and #032

## Table 23. Individual Virtual crossmatch results for Serum #033 vs. Donor #001

Donor #001 - HLA genotype: A*11:01-A*26:01-B*14:01-B*27:05:02G-C*02:02-C*08:02/DRB1*01:01-DRB1*07:01-DRB4*01:01:01G-DQB1*02:02-DQB1*05:01-DPB1*02:01-DPB1*14:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-033 | 83 | Positive | B27(13794) | Negative | none | Unacceptable | |
| 792 | MX-033 | 100 | Positive | B*27:05 (13315), C*02:02 (2007) | Positive | DQB1*02:02(330) | Unacceptable | MX-033 is DQB1*02 |
| 859 | MX-033 | 94 | Positive | B*27(16494), C*02(3825), C*08(2771) | Negative | none | Unacceptable | |
| 1160 | MX-033 | | Positive | B27(13717), Cw2(1953) | Positive | none | Unacceptable | Antibody to C*08:01 detected (MFI=2047), no C*08:02 in SAB panel. |
| 2400 | MX-033 | 97 | Positive | B*27:05(15198) | Positive | none | Unacceptable | |
| 3224 | MX-033 | 98 | Positive | B27, Cw2, Cw8 | Positive | none | Unacceptable | |
| 3753 | MX-033 | 99 | Positive | B27(18604), Cw2(5070), Cw8(4041) | Positive | none | Unacceptable | |
| 3798 | MX-033 | | Positive | B27(>10K), Cw2, Cw8(3K) | Positive | none | | |
| 3966 | MX-033 | | Positive | B27(15584) | Positive | DQB1*02:02(1156) | Unacceptable | |
| 4661 | MX-033 | | Positive | B*27:05(7469) | Positive | none | Unacceptable | |

## Table 24. Individual Virtual crossmatch results for Serum #033 vs. Donor #002

Donor #002 - HLA genotype: A*02:01-A*68:01:02G-B*40:20-B*51:02-C*03:04-C*08:01:01G/DRB1*08:02-DRB1*14:06-DRB3*01:01-DQB1*03:01-DQB1*04:02-DPB1*04:02-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-033 | 83 | Positive | A2(5870) | Negative | none | Unacceptable | |
| 792 | MX-033 | 100 | Positive | A*02:01(4525), A*68:01(514), C*03:04(9565), C*08:01(2167) | Positive | none | Unacceptable | |
| 859 | MX-033 | 94 | Positive | A*02(5595), B*40(21983), C*03:04(14355), C*08:01(2771) | Negative | none | Unacceptable | |
| 1160 | MX-033 | | Positive | A2(4535), B61(19172), Cw10(9443), Cw8(2047) | Positive | none | Unacceptable | No B*40:20 on the panel but serologic equivalent is B61, use MFI of B*40:02 |
| 2400 | MX-033 | 97 | Positive | B61(18012), A2(4972) | Positive | none | Unacceptable | |
| 3224 | MX-033 | 98 | Positive | A2, A68, B61, Cw8, Cw10 | Positive | none | Unacceptable | |
| 3753 | MX-033 | 99 | Positive | A2 (8578), A68 (1788), B61 (20857), Cw10 (16965), Cw8 (4041) | Positive | none | Unacceptable | A2 and A68-repeat MM |
| 3798 | MX-033 | | Positive | B40, Cw10(>10K), A2(5K), Cw8(3K) | Weak Pos | none | | |
| 3966 | MX-033 | | Positive | A2(6480) | Negative | | Unacceptable | |
| 4661 | MX-033 | | Positive | A*02:01(1543), B*40:02 (1678), C*03:04(1288) | Positive | none | Unacceptable | |

## Table 25. Individual Virtual crossmatch results for Serum #033 vs. Donor #003

Donor #003 - HLA genotype: A*68:01-A*68:02-B*53:01-B*48:01-C*04:01:01G-C*08:01:01G/DRB1*04:03-DRB1*13:02-DRB3*03:01-DRB4*01:01:01G-DQB1*03:02-DQB1*06:04-DPB1*04:01:01G-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-033 | 83 | Positive | B48(13792) | Negative | none | Unacceptable | |
| 792 | MX-033 | 100 | Positive | A*68:02(578), A*68:01(514), B*48:01(15514), C*08:01(2167) | Positive | none | Unacceptable | |
| 859 | MX-033 | 94 | Positive | B*48:01(21057), C*08(2771) | Negative | none | Unacceptable | |
| 1160 | MX-033 | | Positive | B48(20168), Cw8(2047) | Positive | none | Unacceptable | |
| 2400 | MX-033 | 97 | Positive | B48(19389), Cw8(2986) | Positive | none | Unacceptable | |
| 3224 | MX-033 | 98 | Positive | A68, B48, Cw8 | Positive | none | Unacceptable | |
| 3753 | MX-033 | 99 | Positive | A68(1788), B48(21389), Cw8(4041) | Positive | none | Unacceptable | A68 repeat MM |
| 3798 | MX-033 | | Positive | B48(>10K), Cw8(3K) | Positive | none | | |
| 3966 | MX-033 | | Positive | B48(19366) | Negative | none | Unacceptable | |
| 4661 | MX-033 | | Negative | none | Negative | none | Acceptable | |

## Table 26. Individual Virtual crossmatch results for Serum #033 vs. Donor #004

Donor #004 - HLA genotype: A*26:01-A*30:01-B*38:01-B*49:01-C*07:01:01G-C*12:03/DRB1*04:02-DRB1*04:05-DRB4*01:01:01G-DQB1*03:02-DPB1*01:01-DPB1*04:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-033 | 83 | Positive | B49(4321) | Negative | none | Unacceptable | |
| 792 | MX-033 | 100 | Positive | A*30:01(8572), B*49:01(4810), C*12:03(1283) | Positive | none | Unacceptable | |
| 859 | MX-033 | 94 | Positive | A*30:01(9273), B*49:01(5114), C*07(10440), C*12:03(1512) | Negative | none | Unacceptable | |
| 1160 | MX-033 | | Positive | A30(10884), B49(4637), Cw7(8470) | Positive | none | Unacceptable | no C*07:01 in SAB assay but C*07:02 positive |
| 2400 | MX-033 | 97 | Positive | A*30:01(10811), B49(5747), Cw7(9189) | Positive | none | Unacceptable | |
| 3224 | MX-033 | 98 | Positive | A30, B49, Cw7, Cw12 | Positive | none | Unacceptable | |
| 3753 | MX-033 | 99 | Positive | A*30:01(11794), B49(7800), Cw7(11595), Cw12(2449) | Positive | none | Unacceptable | |
| 3798 | MX-033 | | Positive | A30, Cw7(10K), B49(5K) | Positive | none | | |
| 3966 | MX-033 | | Positive | A30(9171), C*07:02(7522) | Negative | none | Unacceptable | No bead C*07:01 in kit |
| 4661 | MX-033 | | Positive | A*30:01(1322) | Positive | none | Unacceptable | |

## Table 27. Individual Virtual crossmatch results for Serum #034 vs. Donor #001

Donor #001 - HLA genotype: A*11:01-A*26:01-B*14:01-B*27:05:02G-C*02:02-C*08:02/DRB1*01:01-DRB1*07:01-DRB4*01:01:01G-DQB1*02:02-DQB1*05:01-DPB1*02:01-DPB1*14:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-034 | 85 | Negative | none | Positive | DR1(9837), DR7(4360), DQ5(18910) | Unacceptable | |
| 792 | MX-034 | 99 | Negative | none | Positive | DRB1*01:01(10975), DRB1*07:01(3841), DQB1*05:01(22025) | Unacceptable | |
| 859 | MX-034 | 88 | Negative | none | Positive | DRB1*01(10714), DRB1*07(4058), DQB1*05(23000) | Unacceptable | |
| 1160 | MX-034 | | Negative | none | Positive | DR1(9550), DR7(2717), DQ5(23989) | Unacceptable | |
| 2400 | MX-034 | 89 | Negative | none | Positive | DQ5(19395), DR1(11744), DR7(4451) | Unacceptable | |
| 3224 | MX-034 | 83 | Negative | none | Positive | DR1, DR7, DQ5 | Unacceptable | |
| 3753 | MX-034 | 92 | Negative | none | Positive | DR1(12379), DR7(5537), DQ5(20415) | Unacceptable | |
| 3798 | MX-034 | | Negative | none | Positive | DR1, DQ5(>10K), DR7(4K) | | |
| 3966 | MX-034 | | Negative | none | Positive | DQ5(19174), DR1(10154), DR7(4499) | Unacceptable | |
| 4661 | MX-034 | | Negative | none | Positive | DRB1*01:01(4216), DRB1*07:01(1175), DQB1*05:01(8605) | Unacceptable | |

## Table 28. Individual Virtual crossmatch results for Serum #034 vs. Donor #002

Donor #002 - HLA genotype: A*02:01-A*68:01:02G-B*40:20-B*51:02-C*03:04-C*08:01:01G/DRB1*08:02-DRB1*14:06-DRB3*01:01-DQB1*03:01-DQB1*04:02-DPB1*04:02-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-034 | 85 | Negative | none | Negative | none | Acceptable | |
| 792 | MX-034 | 99 | Negative | B*51:02(518) | Postiive | DQB1*04:02(4101), DQB1*03:01(1001) | Unacceptable | MX-034 is DQB1*07 |
| 859 | MX-034 | 88 | Negative | none | Negative | DQB1*04:02(2832) | Acceptable | |
| 1160 | MX-034 | | Negative | none | Neg/Weak Pos | DQ4(1889) | Acceptable | (2) B*40:20 not present in antibody panel and its serological equivalent is B61 |
| 2400 | MX-034 | 89 | Negative | none | Positive | DQB1*04:02 (5357) | Unacceptable | |
| 3224 | MX-034 | 83 | Negative | B51(874) | Positive | DQ4(3388) | Unacceptable? | Need final XM to determine with augmented Immunosupression |
| 3753 | MX-034 | 92 | Negative | B51(1278) | Neg-borderline | DQ4(3580) | Acceptable | |
| 3798 | MX-034 | | Negative | none | Weak Pos | DQ4(4K) | | |
| 3966 | MX-034 | | Negative | none | Positive | DQ4(2404) | Unacceptable | |
| 4661 | MX-034 | | Negative | none | Negative | none | Acceptable | |

## Table 29. Individual Virtual crossmatch results for Serum #034 vs. Donor #003

Donor #003 - HLA genotype: A*68:01-A*68:02-B*53:01-B*48:01-C*04:01:01G-C*08:01:01G/DRB1*04:03-DRB1*13:02-DRB3*03:01-DRB4*01:01:01G-DQB1*03:02-DQB1*06:04-DPB1*04:01:01G-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-034 | 85 | Negative | none | Positive | DQ6(20947) | Unacceptable | |
| 792 | MX-034 | 99 | Negative | none | Positive | DQB1*06:04(16232) | Unacceptable | |
| 859 | MX-034 | 88 | Negative | none | Positive | DQB1*06:04(19141) | Unacceptable | |
| 1160 | MX-034 | | Negative | none | Positive | DQ6(18321) | Unacceptable | |
| 2400 | MX-034 | 89 | Negative | none | Positive | DQB1*06:04(18444) | Unacceptable | |
| 3224 | MX-034 | 83 | Negative | none | Positive | DQ6 | Unacceptable | |
| 3753 | MX-034 | 92 | Negative | none | Positive | DQ6(21811) | Unacceptable | |
| 3798 | MX-034 | | Negative | none | Positive | DQ6(>10K) | | |
| 3966 | MX-034 | | Negative | none | Positive | DQB1*06:04(18042) | Unacceptable | |
| 4661 | MX-034 | | Negative | none | Positive | DQB1*06:04(14774) | Unacceptable | |

## Table 30. Individual Virtual crossmatch results for Serum #034 vs. Donor #004

Donor #004 - HLA genotype: A*26:01-A*30:01-B*38:01-B*49:01-C*07:01:01G-C*12:03/DRB1*04:02-DRB1*04:05-DRB4*01:01:01G-DQB1*03:02-DPB1*01:01-DPB1*04:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-034 | 85 | Negative | none | Negative | none | Acceptable | |
| 792 | MX-034 | 99 | Negative | B*49:01(387) | Negative | none | Acceptable | |
| 859 | MX-034 | 88 | Negative | none | Negative | none | Acceptable | |
| 1160 | MX-034 | | Negative | none | Negative | none | Acceptable | |
| 2400 | MX-034 | 89 | Negative | none | Negative | none | Acceptable | |
| 3224 | MX-034 | 83 | Negative | none | Negative | none | Acceptable | |
| 3753 | MX-034 | 92 | Negative | none | Negative | none | Acceptable | |
| 3798 | MX-034 | | Negative | none | Negative | none | | |
| 3966 | MX-034 | | Negative | none | Negative | none | Acceptable | |
| 4661 | MX-034 | | Negative | none | Negative | none | Acceptable | |

## Table 31. Individual Virtual crossmatch results for Serum #035 vs. Donor #001

Donor #001 - HLA genotype: A*11:01-A*26:01-B*14:01-B*27:05:02G-C*02:02-C*08:02/DRB1*01:01-DRB1*07:01-DRB4*01:01:01G-DQB1*02:02-DQB1*05:01-DPB1*02:01-DPB1*14:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-035 | 88 | Negative | none | Negative | none | Acceptable | |
| 792 | MX-035 | 84 | Negative | none | Negative | none | Acceptable | |
| 859 | MX-035 | 88 | Negative | B*14:01(2615) | Negative | none | Acceptable | |
| 1160 | MX-035 | | Undetermined | Undetermined | Undetermined | Undetermined | Undetermined | high NC background on antibody assays, test results are invalid. |
| 2400 | MX-035 | 73 | Negative | none | Negative | none | Acceptable | |
| 3224 | MX-035 | 87 | Negative | none | Negative | none | Acceptable | |
| 3753 | MX-035 | 90 | Negative | none | Negative | none | Acceptable | |
| 3798 | MX-035 | | Neg  or Wk Pos | B64(4K) | Weak Positive | none | | |
| 3966 | MX-035 | | Negative | none | Negative | none | Acceptable | |
| 4661 | MX-035 | | Negative | none | Negative | none | Acceptable | |

## Table 32. Individual Virtual crossmatch results for Serum #035 vs. Donor #002

Donor #002 - HLA genotype: A*02:01-A*68:01:02G-B*40:20-B*51:02-C*03:04-C*08:01:01G/DRB1*08:02-DRB1*14:06-DRB3*01:01-DQB1*03:01-DQB1*04:02-DPB1*04:02-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-035 | 88 | Positive | B61(13470) | Negative | none | Unacceptable | |
| 792 | MX-035 | 84 | Negative | none | Negative | none | Acceptable | |
| 859 | MX-035 | 88 | Positive | B*40(13406), B*51:02(2378) | Negative | none | Unacceptable | |
| 1160 | MX-035 | | Undetermined | Undetermined | Undetermined | Undetermined | Undetermined | high NC background on antibody assays, test results are invalid. |
| 2400 | MX-035 | 73 | Positive | B61(11017) | Positive | none | Unacceptable | |
| 3224 | MX-035 | 87 | Positive | B61(4774) | Positive | none | Unacceptable | Need final XM to confirm |
| 3753 | MX-035 | 90 | Positive | B61(14229) | Positive | none | Unacceptable | |
| 3798 | MX-035 | | Positive | B40(>10K) | Positive | none | | |
| 3966 | MX-035 | | Positive | B61(14805) | Negative | none | Unacceptable | |
| 4661 | MX-035 | | Weak Pos | B*40:02(426) | Weak Pos | | Unacceptable | |

## Table 33. Individual Virtual crossmatch results for Serum #035 vs. Donor #003

Donor #003 - HLA genotype: A*68:01-A*68:02-B*53:01-B*48:01-C*04:01:01G-C*08:01:01G/DRB1*04:03-DRB1*13:02-DRB3*03:01-DRB4*01:01:01G-DQB1*03:02-DQB1*06:04-DPB1*04:01:01G-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-035 | 88 | Positive | B48(6161), B53(4504) | Negative | none | Unacceptable | |
| 792 | MX-035 | 84 | Negative | none | Negative | none | Acceptable | |
| 859 | MX-035 | 88 | Positive | B*48:01(5072), B*53:01(4084) | Negative | | Unacceptable | |
| 1160 | MX-035 | | Undetermined | Undetermined | Undetermined | Undetermined | Undetermined | high NC background on antibody assays, test results are invalid. |
| 2400 | MX-035 | 73 | Negative | none | Negative | none | Acceptable | |
| 3224 | MX-035 | 87 | Negative | B48(784), B53(988) | Negative | none | Acceptable? | Need final XM to confirm |
| 3753 | MX-035 | 90 | Positive | B48(6729), B53(5121) | Positive | none | Unacceptable | possible with desensitization |
| 3798 | MX-035 | | Positive | B48(7K), B53(5K) | Weak Pos | none | | |
| 3966 | MX-035 | | Positive | B48(6275) | Negative | none | Unacceptable | |
| 4661 | MX-035 | | Negative | none | Negative | none | Acceptable | |

## Table 34. Individual Virtual crossmatch results for Serum #035 Donor #004

Donor #004 - HLA genotype: A*26:01-A*30:01-B*38:01-B*49:01-C*07:01:01G-C*12:03/DRB1*04:02-DRB1*04:05-DRB4*01:01:01G-DQB1*03:02-DPB1*01:01-DPB1*04:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|--------|---------|------|---------------------------|-------------------|---------------------------|--------------------|-----------------|---------------------|
| 206 | MX-035 | 88 | Positive | B49(15083) | Negative | none | Unacceptable | |
| 792 | MX-035 | 84 | Positive | B*49:01(7039) | Positive | DPB1*01:01(1385) | Unacceptable | |
| 859 | MX-035 | 88 | Positive | B*38:01(3358), B*49:01(15572) | Negative | none | Unacceptable | |
| 1160 | MX-035 | | Undetermined | Undetermined | Undetermined | Undetermined | Undetermined | high NC background on antibody assays, test results are invalid. |
| 2400 | MX-035 | 73 | Positive | B49(12558) | Positive | none | Unacceptable | |
| 3224 | MX-035 | 87 | Positive | B49(5137) | Positive | none | Unacceptable | Need final XM to confirm |
| 3753 | MX-035 | 90 | Positive | B49(16009) | Positive | none | Unacceptable | |
| 3798 | MX-035 | | Positive | B49(>10K), B38(5K) | Positive | none | | |
| 3966 | MX-035 | | Positive | B49(16150), B38(3400) | Negative | DPB1*01:01(927) | Unacceptable | |
| 4661 | MX-035 | | Positive | B*49:01(1375) | Positive | none | Unacceptable | |

## Table 35. Individual Virtual crossmatch results for Serum #036 vs. Donor #001

Donor #001 - HLA genotype: A*11:01-A*26:01-B*14:01-B*27:05:02G-C*02:02-C*08:02/DRB1*01:01-DRB1*07:01-DRB4*01:01:01G-DQB1*02:02-DQB1*05:01-DPB1*02:01-DPB1*14:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-036 | 91 | Negative | none | Positive | DR7(17279), DR53(5031) | Unacceptable | |
| 792 | MX-036 | 99 | Positive | B*27:05(13438), B*14:01(1097), C*02:02(3352) | Positive | DRB1*07:01(14291), DRB4*01:01(3703), DPB1*14:01(9047), DPB1*02:01(8090) | Unacceptable | |
| 859 | MX-036 | 92 | Positive | B*14:01(1490), B*27:05(16815), C*02:02(6379) | Positive | DRB1*07(17474), DRB4*01(3903), DPB1*02(9528), DPB1*14(10103) | Unacceptable | |
| 1160 | MX-036 | | Positive | B27(16517), B64(1333), Cw2(4590) | Positive | DR7(13407), DR53(2342), DP14(9055), DP2(8431) | Unacceptable | |
| 2400 | MX-036 | 94 | Positive | B*27:05(14663) | Positive | DP14(9954), DP2(8016) | Unacceptable | |
| 3224 | MX-036 | 98 | Positive | B27, B64, Cw2 | Positive | DR7, DR53, DP2, DP14 | Unacceptable | |
| 3753 | MX-036 | 98 | Positive | B27(17088), B64(1531), Cw2(5407) | Positive | DR7(19910), DR53(6142), DP2(11039), DP14(12293) | Unacceptable | DR53-repeat MM |
| 3798 | MX-036 | | Positive | B27(>10K), Cw2(5K) | Positive | DR7, DP14(>10K), DP2(8K), DR53(3K) | | |
| 3966 | MX-036 | | Positive | B27(16348), C*02:02(4105) | Positive | DRB1*07:01(15482), DPB1*14:01(9168), DPB1*02:01(8270), DRB4*01:01(3619) | Unacceptable | |
| 4661 | MX-036 | | Positive | B*27:05(7413) | Positive | DRB1*07:01(7421), DRB4*01:01(1681) | Unacceptable | |

## Table 36. Individual Virtual crossmatch results for Serum #036 vs. Donor #002

Donor #002 - HLA genotype: A*02:01-A*68:01:02G-B*40:20-B*51:02-C*03:04-C*08:01:01G/DRB1*08:02-DRB1*14:06-DRB3*01:01-DQB1*03:01-DQB1*04:02-DPB1*04:02-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-036 | 91 | Positive | B61(15535) | Negative | none | Unacceptable | |
| 792 | MX-036 | 99 | Negative | none | Positive | DQB1*03:01(442), DPB1*04:02(8677) | Unacceptable | |
| 859 | MX-036 | 92 | Positive | B*40(19900) | Positive | DPB1*04:02(10084) | Unacceptable | |
| 1160 | MX-036 | | Positive | B61(17427) | Positive | DP4(8231) | Unacceptable | (1) No B*40:20 on the panel but serologic equivalent is B61 |
| 2400 | MX-036 | 94 | Positive | B61(15326) | Positive | DPB1*04:02(9129) | Unacceptable | |
| 3224 | MX-036 | 98 | Positive | B61 | Positive | DPB1*04:02 | Unacceptable | |
| 3753 | MX-036 | 98 | Positive | B61(17048) | Positive | DP402(12207) | Unacceptable | |
| 3798 | MX-036 | | Positive | B40(>10K) | Positive | DP402(8K) | | |
| 3966 | MX-036 | | Positive | B61(16027) | Positive | DPB1*04:02(9177) | Unacceptable | |
| 4661 | MX-036 | | Positive | B*40:02(1379) | Positive | | Unacceptable | |


## Table 37. Individual Virtual crossmatch results for Serum #036 vs. Donor #003

Donor #003 - HLA genotype: A*68:01-A*68:02-B*53:01-B*48:01-C*04:01:01G-C*08:01:01G/DRB1*04:03-DRB1*13:02-DRB3*03:01-DRB4*01:01:01G-DQB1*03:02-DQB1*06:04-DPB1*04:01:01G-DPB1*04:02:01G

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-036 | 91 | Positive | B48(17914) | Positive | DR53(5031) | Unacceptable | |
| 792 | MX-036 | 99 | Positive | B*48:01(13951) | Positive | DRB4*01:01(3703), DPB1*04:02(8677) | Unacceptable | |
| 859 | MX-036 | 92 | Positive | B*48:01(18782) | Positive | DRB4*01(3903), DPB1*04:02(10084) | Unacceptable | |
| 1160 | MX-036 | | Positive | B48(16790) | Positive | DR53(2342), DPB1*04:02(8231) | Unacceptable | |
| 2400 | MX-036 | 94 | Positive | B48(16481) | Positive | DRB4*01:01(3590), DPB1*04:02(9129) | Unacceptable | |
| 3224 | MX-036 | 98 | Positive | B48 | Positive | DR53, DPB1*04:02 | Unacceptable | |
| 3753 | MX-036 | 98 | Positive | B48(17647) | Positive | DR53(6142), DP402(12207) | Unacceptable | DR53-repeat MM |
| 3798 | MX-036 | | Positive | B48(>10K) | Positive | DR53(3K), DP402(8K) | | |
| 3966 | MX-036 | | Positive | B48(16784) | Positive | DPB1*04:02(9177) | Unacceptable | |
| 4661 | MX-036 | | Negative | none | Negative | none | Acceptable | |

## Table 38. Individual Virtual crossmatch results for Serum #036 vs. Donor #004

Donor #004 - HLA genotype: A*26:01-A*30:01-B*38:01-B*49:01-C*07:01:01G-C*12:03/DRB1*04:02-DRB1*04:05-DRB4*01:01:01G-DQB1*03:02-DPB1*01:01-DPB1*04:01

| Center | Patient | CPRA | Virtual T-cell Prediction | Class I DSA (MFI) | Virtual B-cell Prediction | Class II DSA (MFI) | Risk Assessment | Additional Comments |
|---|---|---|---|---|---|---|---|---|
| 206 | MX-036 | 91 | Positive | B*38(3794) | Positive | DR53(5031) | Unacceptable | |
| 792 | MX-036 | 99 | Positive | B*38:01(3168), B*49:01(2010) | Positive | DRB4*01:01(3703), DPB1*01:01(5093) | Unacceptable | |
| 859 | MX-036 | 92 | Positive | B*38:01(4380), B*49:01(2394) | Positive | DRB4*01:01(3903), DPB1*01:01(5625) | Unacceptable | |
| 1160 | MX-036 | | Positive | B38(3408), B49(2957) | Positive | DR53(2342), DP1(5378) | Unacceptable | |
| 2400 | MX-036 | 94 | Positive | B38(3609), B49(2803) | Positive | DRB4*01:01(3590), DPB1*01:01(5282) | Unacceptable | |
| 3224 | MX-036 | 98 | Positive | B38, B49 | Positive | DR53, DP1 | Unacceptable | |
| 3753 | MX-036 | 98 | Positive | B38(4407) | Positive | DR53(6142), DP1(7706) | Unacceptable | DR53-repeat MM |
| 3798 | MX-036 | | Neg or Weak Pos | B38(4K), B49(3K) | Positive | DR53(3K), DPB1*01:01(5K) | | |
| 3966 | MX-036 | | Positive | B38(3210), B49(2281) | Positive | DPB1*01:01(5350) | Unacceptable | |
| 4661 | MX-036 | | Negative | none | Positive | DRB4*01:01(1681) | Unacceptable | |