

REPORT OF THE 21st UCLA INTERNATIONAL KIR EXCHANGE

MAY 5, 2010

KIR

81-84

Dear Colleagues:

For the 21st KIR Exchange, 4 DNA samples (KDNA#81-84) were shipped to each laboratory on February 3, 2010. Sixty laboratories submitted their KIR typing results. The majority of the laboratories used either commercial or in-house developed sequence-specific primer (SSP) based PCR typing systems, and others used sequence-specific oligonucleotide probing (SSOP) method.

The results for the 21st KIR Exchange are summarized in Table 1 and individual laboratory results reported for each DNA sample are provided in Tables 2-5. Subtyping results for KIR2DL1, 2DL2, 2DL5, 3DL1, 2DS1, 2DS4, 2DS5, and 3DP1 loci were reported by some laboratories. The positive/negative

assignments for all four DNA samples were reported without any discrepancy for 11 of the 16 tested KIR loci (KIR2DL1, 2DL3, 2DL4, 2DL5, 3DL2, 3DL3, 3DS1, 2DS3, 2DS4, 2DP1, and 3DP1). Discrepant results from the consensus typing are italicized in tables 1-5, and described in the summation for each sample. Discrepancies at the allele level are not italicized. We encourage the participating laboratories to resolve the discrepancies so that the information can be shared to develop reliable KIR typing systems.

We thank you for your continued participation in the UCLA KIR Exchange program.

KIR Exchange Sample: KDNA # 0081:

This sample was isolated from a Black donor. The consensus KIR type of this DNA is: 2DL1-2DL2-2DL3-2DL4-2DL5B-3DL1-3DL2-3DL3-2DS1-2DS2-2DS4-2DS5-2DP1-3DP1. One laboratory reported this sample as negative for 3DL1, one laboratory reported it as negative for both 2DS1 and 2DS5, and another laboratory reported it as negative for 3DP1. This is the first time this genotype has been typed in the KIR Exchange. It occurs most frequently in Amazonian Amerindians (10%) (1). It has also been observed at a frequency of 8.1% in populations of the Cook Islands and at 5.2% in African Americans (2, 3).

KIR Exchange Sample: KDNA # 0082:

KDNA#82 was isolated from an Hispanic individual. The consensus KIR type is reported as 2DL1-2DL2-2DL4-2DL5A-2DL5B-3DL1-3DL2-3DL3-3DS1-2DS1-2DS2-2DS3-2DP1-3DP1. This is a rare genotype and has only been observed in Asian Indian (0.9%) and Hispanic (0.8%) populations (2). For this sample, two laboratories that used multiplex SSP typing system (4) reported it as negative for 3DL1, and one laboratory reported it as positive for 2DS5. Chen reported the presence of a potential novel KIR3DL1 allele, with the observance of an unexpected rSSO reactivity pattern. Furthermore, Schellenkens and Marsh stated, "KDNA0082 may contain a KIR3DL1*059 or KIR3DL1*060 allele. These alleles are known as KIR3DL1/2v recombinant

alleles that consist of an exon 1-5 (exon 5 up until p920) identical to the KIR3DL1 consensus sequence and exon 5-9 (exon 5 from p920 onwards) identical to the KIR3DL2 consensus sequence."

KIR Exchange Sample: KDNA # 0083:

KDNA#83 was obtained from a Vietnamese donor. The consensus KIR type is: 2DL1-2DL3-2DL4-3DL1-3DL2-3DL3-3DS1-2DS4-2DP1-3DP1. One laboratory typed this DNA as positive for 2DS1, and another laboratory typed it as positive for 2DS2. Schellenkens and Marsh explained, "KDNA#0083 has three copies of the KIR3DL1/3DS1 locus with two copies of the KIR3DL1 gene and one copy of the KIR3DS1 gene". This gene duplication phenomenon was previously described (5, 6, 7). This genotype has been observed most frequently in Southeast Asian (1-5.7%) populations and in Caucasians at a frequency of 1 – 6% (8).

KIR Exchange Sample: KDNA # 0084:

The ethnic information for the sample was not available. The consensus KIR type of this sample is: 2DL1-2DL2-2DL3-2DL4-2DL5B-3DL1-3DL2-3DL3-2DS2-2DS4-2DS5-2DP1-3DP1. Two laboratories reported this sample as negative for 2DL2, one reported it negative for 3DL1, and another reported it as positive for 2DS1. This genotype occurs at high frequency from 3.5-5% in populations of African descent (8).

References

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3. Velickovic, M., Velickovic, Z., and Dunckley, H. (2006). Diversity of killer cell immunoglobulin-like receptor genes in Pacific Islands populations. *Immunogenetics* 58, 523-532.
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8. Yawata, M., Yawata, N., Abi-Rached, L., and Parham, P. (2002). Variation within the human killer cell immunoglobulin-like receptor (KIR) gene family. *Crit Rev Immunol* 22, 463-482.

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Table 1. Summary of the 21st KIR Exchange (KDNA#81-84)

KIR Ex.	DNA	# reporting labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
#21	#0081	60	POS	POS *004 [4]	POS	POS NT [2]	POS B [12] B*003/ *006 [6] B*003 [2] B*003/ *004/ *006-*008/ *011 [1]	POS *00401 [2] *0401 [1] <i>NEG [1]</i>	POS NT [1]	POS NT [1]	NEG	POS *003/ *004 [1] *004/ *008 [1] <i>NEG [1]</i>	POS	NEG	POS DEL [29] FULL, DEL [1]	POS *003 [1] <i>NEG [1]</i>	POS NT [2]	POS *003 [18] *003/ *005/ *006 [3] *00301/ *00302 [2] DEL [1] *001-*006 [1] NT [2] <i>NEG [1]</i>
	#0082	60	POS *004 [1]	POS *001-*003/ *005 [2]	NEG NT [1]	POS NT [2]	POS A,B [11] A*001/ *005, B*002/ *004/ *007 [2] A*001/ *005, B*002- *004/ *006/ *007 [1] A*001/ *005, B*002/ *009/ *010 [1] A*005 [1] B [1]	POS NT [1] <i>NEG [2]</i>	POS NT [2]	POS NT [1]	POS	POS *003, *004 [1]	POS	POS	NEG	NEG <i>POS [1]</i>	POS NT [2]	POS *001/ *002/ *004, *003 [7] *001-*004 [3] *001/ *002/ *004, *003/ *005/ *006 [2] *001/ *002/ *004 [1] *001/ *002/ *004, *00301/ *00302 [1] FULL, DEL [1] *001-*006 [1] *003 [1] NT [2]
	#0083	60	POS	NEG	POS NT [1]	POS NT [2]	NEG	POS *005, *01502 [1] *00501, *01502 [1] NT [1]	POS NT [1]	POS NT [1]	POS NT [1]	NEG <i>POS [1]</i>	NEG NT [1] <i>POS [1]</i>	NEG	POS FULL, DEL [19] FULL [4]	NEG	POS NT [2]	POS *001/ *002/ *004, *003 [6] *001-*004 [3] *001/ *002/ *004, *003/ *005/ *006 [2] FULL, DEL [1] *001-*006 [1] *001/ *002/ *004 [1] *001/ *002/ *004, *00301/ *00302 [1] *003 [1] *003/ *004 [1] NT [2]
	#0084	60	POS	POS *001- *003/ *005 [2] *004 [1] <i>NEG [2]</i>	POS	POS NT [2]	POS B [15] B*002/ *004/ *007 [3] B*002-*004/ *006/ *007 [1] B*002/ *004/ *007, *003/ *006 [1] B*003/ *004/ *006-*008/ *011 [1] B*004/ *006 [1]	POS *00401, *01501 [2] *004 [1] <i>NEG [1]</i>	POS NT [1]	POS NT [1]	NEG	NEG <i>POS [1]</i>	POS	NEG	POS FULL, DEL [18] FULL [4]	POS	POS NT [2]	POS *001/ *002/ *004, *003 [6] *001-*004 [3] *001/ *002/ *004, *003/ *005/ *006 [2] FULL, DEL [1] *001-*006 [1] *001/ *002/ *004 [1] *002/ *004, *00301/ *00302 [1] *003 [1] NT [2]

KEY for Table 1
 [] - number of labs reporting allele assignment/POS/NEG/NT
 POS - Presence of gene
 NEG - Absence of gene
 NT - Not typed
italics - assignment different from consensus

KEY for Tables 2-5
italics - assignment different from consensus
 SSP - Sequence-specific priming-based typing
 SSOP - Sequence-specific oligonucleotide probing-based typing
 RSSOP - Reverse Sequence-specific oligonucleotide probing-based typing
 SBT - Sequencing-based typing

Table 2. KIR Exchange Sample: KDNA #81 (Black)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams, Sharon	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
8050	Baxter-Lowe, Lee	POS	POS	POS	POS	B*003/ *006	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006/ *007	POS	POS	*003	SSP
8025	Carrington&Marti	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006/ *007/ *009	POS	POS	*003/ *005/ *006	SSP
785	Chan, Soh Ha	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
3224	Chen, Dong-Feng	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP, RSSOP
124	Christiansen&Wit	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	DEL	POS	NT	NT	MULTIPLEX SSP
3632	Colombe, Beth	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
189	Crowe, Deborah	POS	POS	POS	POS	B*003/ *006	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
8030	Davidson&Poulto	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
8031	Dinauer, David	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
3186	Dunckley, Heath	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
4251	Ellis, Thomas	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006/ *007	POS	POS	*003	SSP
8051	Endres, Robert	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
2549	Fagoaga, Omar	POS	POS	POS	POS	B*003/ *006	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
8038	Fernandez-Vina&	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	*003/ *006- *009	POS	POS	POS	RSSOP
762	Fischer&Mayr	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
8026	Gardiner, Clair M.	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
8040	Gladman/Pellett/P	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
234	Gomez, Carmen	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
4985	Graff, Ralph J.	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
8041	Han, Hoon	POS	*004	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006	POS	POS	*003	SSP
1461	Hidajat, M.	POS	POS	POS	POS	B*003	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006	POS	POS	*003	SSP
5000	Hsu, Susan H.	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP, SSP
2344	Hurley&Hartzman	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
4337	Kim, Tai-Gyu	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
836	KuKuruga, Debor	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
8046	Kusnierczyk, Piot	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	DEL	POS	POS	POS	MULTIPLEX SSP, SSP
8061	Lanzer, G.	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
278	Lee, Jar-How	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
1108	Linke, Robert	POS	*004	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	*00103, *003/ *004/ *006-*009	POS	POS	POS	RSSOP
8067	Marino, Susan R.	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	DEL	POS	POS	*003/ *005/ *006	SSP, RSSOP

Table 2. KIR Exchange Sample: KDNA #81 (Black)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5142	Marsh,Steven	POS	POS	POS	POS	POS	*00401	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006/ *007/ *009, -	POS	POS	*003, -	SSP,SBT
733	Mytilineos,Joanni	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	SSP
8039	Noreen,Harriet	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
8022	Olerup,Olle	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
3966	Permpikul&Vejba	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
16	Pidwell/Askar	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP,SSP
8057	Ray&Balazs	POS	*004	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006-*009	POS	POS	POS	RSSOP
3753	Reed&Rajalingam	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
8064	Roberts,Chrissy	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006/ *007, -	POS	POS	*003, -	WGA-SSP
8060	Rost&Klein	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
1694	Sauer&Gottwald	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
3410	Schroeder,M.L.	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006/ *007	POS	POS	*003	SSP
1426	Senitzer,David	POS	POS	POS	POS	B*003	*00401	POS	POS	NEG	POS	POS	NEG	DEL	POS	POS	POS	MULTIPLEX SSP
769	Tavoularis,Sofia	POS	POS	POS	POS	B*003/ *004/ *006-*008/ *011	POS	POS	POS	NEG	POS	POS	NEG	*003/ *006- *009	POS	POS	*003/ *005/ *006	RSSOP,SSP
230	Thoni,Deborah	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
747	Tiercy,Jean-Marie	POS	POS	POS	POS	B*003/ *006	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*00301/ *00302	SSP
5451	Tilanus,Marcel	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
4021	Trachtenberg,Eliz	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
8024	Trowsdale,John	POS	*004	POS	NT	POS	POS	NT	POS	NEG	*004/ *008	POS	NEG	DEL	*003	POS	*003	SSP
5462	Turner,E.V.	POS	POS	POS	POS	POS	*004	POS	POS	NEG	*003/ *004	POS	NEG	*003/ *004	POS	POS	*001-*006	SSP
8053	Tyan,Dolly	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP
8028	Uhrberg,Markus	POS	POS	POS	NT	POS	POS	POS	NT	NEG	POS	POS	NEG	POS	POS	NT	NT	SSP
3775	Vidan-Jeras,Blan	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
8023	Vilches,Carlos	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	DEL	POS	POS	DEL	SSP
8047	Wassmuth,Ralf	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
705	Watkins,David I.	POS	POS	POS	POS	B*003/ *006	POS	POS	POS	NEG	POS	POS	NEG	*003/ *004/ *006/ *007	POS	POS	*00301/ *00302	SSP
1466	Yu,Neng	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RSSOP
5282	Yu_Neng/UMMHC	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
713	Zachary,Andrea	POS	POS	POS	POS	B*003/ *006	POS	POS	POS	NEG	POS	POS	NEG	*003-*007	POS	POS	*003	SSP

Table 3. KIR Exchange Sample: KDNA #82 (Hispanic)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams, Sharon	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
8050	Baxter-Lowe, Lee	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
8025	Carrington&Marti	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003/ *005/ *006	SSP
785	Chan, Soh Ha	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RT-PCR
3224	Chen, Dong-Feng	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP, RSSOP
124	Christiansen&Wit	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NT	NT	MULTIPLEX SSP
3632	Colombe, Beth	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
189	Crowe, Deborah	POS	POS	NEG	POS	A*001/ *005, B*002/ *004/ *007	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
8030	Davidson&Poulto	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RSSOP
8031	Dinauer, David	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003	SSP
3186	Dunckley, Heathe	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
4251	Ellis, Thomas	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003	SSP
8051	Endres, Robert	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001-004	SSP
2549	Fagoaga, Omar	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001-004	SSP
8038	Fernandez-Vina&	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
762	Fischer&Mayr	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
8026	Gardiner, Clair M.	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*003	SSP
8040	Gladman/Pellett/P	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
234	Gomez, Carmen	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
4985	Graff, Ralph J.	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003	SSP
8041	Han, Hoon	*004	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
1461	Hidajat, M.	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
5000	Hsu, Susan H.	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP, SSP
2344	Hurley&Hartzman	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
4337	Kim, Tai-Gyu	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
836	KuKuruga, Debor	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
8046	Kusnierczyk, Piot	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	MULTIPLEX SSP, SSP
8061	Lanzer, G.	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
278	Lee, Jar-How	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
1108	Linke, Robert	POS	*001- *003/ *005	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
8067	Marino, Susan R.	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003/ *005/ *006	SSP, RSSOP
5142	Marsh, Steven	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003	SSP, SBT
733	Mytilineos, Joanni	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP

Table 3. KIR Exchange Sample: KDNA #82 (Hispanic)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
8039	Noreen, Harriet	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
8022	Olerup, Olle	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
3966	Permpikul&Vejba	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
16	Pidwell/Askar	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP, SSP
8057	Ray&Balazs	POS	*001- *003/ *005	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
3753	Reed&Rajalingam	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
8064	Roberts, Chrissy	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003	WGA-SSP
8060	Rost&Klein	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
1694	Sauer&Gottwald	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
3410	Schroeder, M.L.	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004	SSP
1426	Senitzer, David	POS	POS	NEG	POS	A*005	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	MULTIPLEX SSP
769	Tavoularis, Sofia	POS	POS	NEG	POS	A*001/ *005, B*002/ *009/ *010	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP, SSP
230	Thoni, Deborah	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
747	Tiercy, Jean-Marie	POS	POS	NEG	POS	A*001/ *005, B*002- *004/ *006/ *007	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *00301/ *00302	SSP
5451	Tilanus, Marcel	POS	POS	NEG	POS	POS	NT	NT	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
4021	Trachtenberg, Eliz	POS	POS	NT	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
8024	Trowsdale, John	POS	POS	NEG	NT	POS	POS	NT	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003	SSP
5462	Turner, E. V.	POS	POS	NEG	POS	B	POS	POS	POS	POS	*003, *004	POS	POS	NEG	NEG	POS	*001- *006	SSP
8053	Tyan, Dolly	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001/ *002/ *004, *003	SSP
8028	Uhrberg, Markus	POS	POS	NEG	NT	POS	POS	POS	NT	POS	POS	POS	POS	NEG	NEG	NT	NT	SSP
3775	Vidan-Jeras, Blan	POS	POS	NEG	POS	A, B	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
8023	Vilches, Carlos	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	FULL, DEL	SSP
8047	Wassmuth, Ralf	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
705	Watkins, David I.	POS	POS	NEG	POS	A*001/ *005, B*002/ *004/ *007	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001- *004	SSP
1466	Yu, Neng	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	RSSOP
5282	Yu_Neng/UMMHC	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP
713	Zachary, Andrea	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	SSP

Table 4. KIR Exchange Sample: KDNA #83 (Vietnamese)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams, Sharon	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8050	Baxter-Lowe, Lee	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8025	Carrington&Marti	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001, *003/ *004/ *006/ *007/ *009	NEG	POS	*001/ *002/ *004, *003/ *005/ *006	SSP
785	Chan, Soh Ha	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
3224	Chen, Dong-Feng	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP, RSSOP
124	Christiansen&Wit	POS	NEG	NT	POS	NEG	NT	POS	POS	NT	NEG	NT	NEG	FULL, DEL	NEG	NT	NT	MULTIPLEX SSP
3632	Colombe, Beth	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
189	Crowe, Deborah	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	SSP
8030	Davidson&Poulto	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	NEG	POS	POS	RSSOP
8031	Dinauer, David	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001/ *002, *003- *007	NEG	POS	*001/ *002/ *004, *003	SSP
3186	Dunckley, Heath	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
4251	Ellis, Thomas	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001/ *002, *003/ *004/ *006/ *007	NEG	POS	*001/ *002/ *004, *003	SSP
8051	Endres, Robert	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001- *007	NEG	POS	*001- *004	SSP
2549	Fagoaga, Omar	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001- *007	NEG	POS	*001- *004	SSP
8038	Fernandez-Vina&	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001, *003/ *006- *009	NEG	POS	POS	RSSOP
762	Fischer&Mayr	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8026	Gardiner, Clair M.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001	NEG	POS	*003	SSP
8040	Gladman/Pellett/P	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
234	Gomez, Carmen	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
4985	Graff, Ralph J.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8041	Han, Hoon	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	*003/ *004	SSP
1461	Hidajat, M.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
5000	Hsu, Susan H.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP, SSP
2344	Hurley&Hartzman	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
4337	Kim, Tai-Gyu	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
836	KuKuruga, Debor	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8046	Kusnierczyk, Piot	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL, DEL	NEG	POS	POS	MULTIPLEX SSP, SSP
8061	Lanzer, G.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
278	Lee, Jar-How	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
1108	Linke, Robert	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*00101- *00103, *003/ *004/ *006- *009	NEG	POS	POS	RSSOP
8067	Marino, Susan R.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL, DEL	NEG	POS	*001/ *002/ *004, *003/ *005/ *006	SSP, RSSOP
5142	Marsh, Steven	POS	NEG	POS	POS	NEG	*00501, *01502	POS	POS	POS	NEG	NEG	NEG	*001, *003/ *004/ *006/ *007/ *009	NEG	POS	*001/ *002/ *004, *003	SSP

Table 4. KIR Exchange Sample: KDNA #83 (Vietnamese)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
733	Mytilineos,Joanni	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8039	Noreen,Harriet	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
8022	Olerup,Olle	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
3966	Permpikul&Vejba	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
16	Pidwell/Askar	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP,SSP
8057	Ray&Balazs	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*00101/ *00102, *003/ *004/ *006-*009	NEG	POS	POS	RSSOP
3753	Reed&Rajalingam	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
8064	Roberts,Chrissy	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001, *003/ *004/ *006/ *007	NEG	POS	*001/ *002/ *004, *003	WGA-SSP
8060	Rost&Klein	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
1694	Sauer&Gottwald	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
3410	Schroeder,M.L.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001/ *002, *003/ *004/ *006/ *007	NEG	POS	*001/ *002/ *004	SSP
1426	Senitzer,David	POS	NEG	POS	POS	NEG	*01502, *005	POS	POS	POS	NEG	NEG	NEG	FULL, DEL	NEG	POS	POS	MULTIPLEX SSP
769	Tavoularis,Sofia	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001, *003/ *006-*009	NEG	POS	POS	RSSOP,SSP
230	Thoni,Deborah	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
747	Tiercy,Jean-Marie	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001/ *002, *003-*007	NEG	POS	*001/ *002/ *004, *00301/ *00302	SSP
5451	Tilanus,Marcel	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
4021	Trachtenberg,Eliz	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8024	Trowsdale,John	POS	NEG	POS	NT	NEG	POS	NT	POS	POS	NEG	NEG	NEG	FULL, DEL	NEG	POS	*001/ *002/ *004, *003	SSP
5462	Turner,E.V.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001, *003/ *004/ *006/ *007/ *009	NEG	POS	*001-*006	SSP
8053	Tyan,Dolly	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001/ *002, *003-*007	NEG	POS	*001/ *002/ *004, *003	SSP
8028	Uhrberg,Markus	POS	NEG	POS	NT	NEG	POS	POS	NT	POS	NEG	NEG	NEG	POS	NEG	NT	NT	SSP
3775	Vidan-Jeras,Blan	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8023	Vilches,Carlos	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL, DEL	NEG	POS	FULL, DEL	SSP
8047	Wassmuth,Ralf	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
705	Watkins,David I.	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	*001-*004/ *006/ *007	NEG	POS	*001-*004	SSP
1466	Yu,Neng	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RSSOP
5282	Yu_Neng/UMMHC	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
713	Zachary,Andrea	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP

Table 5. KIR Exchange Sample: KDNA #84 (Unknown)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams, Sharon	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
8050	Baxter-Lowe, Lee	POS	POS	POS	POS	B*002/ *004/ *007, *003/ *006	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
8025	Carrington&Marti	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	*001, *003/ *004/ *006/ *007/ *009	POS	POS	*001/ *002/ *004, *003/ *005/ *006	SSP
785	Chan, Soh Ha	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RT-PCR
3224	Chen, Dong-Feng	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP, SSP
124	Christiansen&Wit	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	FULL, DEL	POS	NT	NT	MULTIPLEX SSP
3632	Colombe, Beth	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
189	Crowe, Deborah	POS	POS	POS	POS	B*002/ *004/ *007	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
8030	Davidson&Poulto	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
8031	Dinauer, David	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	*001/ *002, *003- *007	POS	POS	*001/ *002/ *004, *003	SSP
3186	Dunkley, Heathe	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
4251	Ellis, Thomas	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	*001/ *002, *003/ *004/ *006/ *007	POS	POS	*001/ *002/ *004, *003	SSP
8051	Endres, Robert	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	*001- *007	POS	POS	*001- *004	SSP
2549	Fagoaga, Omar	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	*001- *007	POS	POS	*001- *004	SSP
8038	Fernandez-Vina&	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	*001, *003/ *006- *009	POS	POS	POS	RSSOP
762	Fischer&Mayr	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
8026	Gardiner, Clair M.	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	NEG	POS	NEG	*001	POS	POS	*003	SSP
8040	Gladman/Pellett/P	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
234	Gomez, Carmen	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
4985	Graff, Ralph J.	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
8041	Han, Hoon	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
1461	Hidajat, M.	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
5000	Hsu, Susan H.	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP, SSP
2344	Hurley&Hartzman	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
4337	Kim, Tai-Gyu	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
836	KuKuruga, Debor	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
8046	Kusnierczyk, Piot	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	FULL, DEL	POS	POS	POS	MULTIPLEX SSP, SSP
8061	Lanzer, G.	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
278	Lee, Jar-How	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
1108	Linke, Robert	POS	*001- *003/ *005	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	*00101- *00103, *003/ *004/ *006- *009	POS	POS	POS	RSSOP

Table 5. KIR Exchange Sample: KDNA #84 (Unknown)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
8067	Marino,Susan R.	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	FULL, DEL	POS	POS	*001/ *002/ *004, *003/ *005/ *006	RSSOP,SSP
5142	Marsh,Steven	POS	POS	POS	POS	POS	*00401, *01501	POS	POS	NEG	NEG	POS	NEG	*001, *003/ *004/ *006/ *007/ *009	POS	POS	*001/ *002/ *004, *003	SSP
733	Mytilineos,Joanni	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
8039	Noreen,Harriet	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
8022	Olerup,Olle	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
3966	Permpikul&Vejba	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
16	Pidwell/Askar	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP,SSP
8057	Ray&Balazs	POS	*001-*003/ *005	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	*00101/ *00102, *003/ *004/ *006-*009	POS	POS	POS	RSSOP
3753	Reed&Rajalingam	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
8064	Roberts,Chrissy	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	*001, *003/ *004/ *006/ *007	POS	POS	*001/ *002/ *004, *003	WGA-SSP
8060	Rost&Klein	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
1694	Sauer&Gottwald	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
3410	Schroeder,M.L.	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	*001/ *002, *003/ *004/ *006/ *007	POS	POS	*001/ *002/ *004	SSP
1426	Senitzer,David	POS	POS	POS	POS	B*004/ *006	*00401, *01501	POS	POS	NEG	NEG	POS	NEG	FULL, DEL	POS	POS	POS	MULTIPLEX SSP
769	Tavoularis,Sofia	POS	POS	POS	POS	B*003/ *004/ *006-*008/ *011	POS	POS	POS	NEG	NEG	POS	NEG	*001, *003/ *006-*009	POS	POS	POS	RSSOP,SSP
230	Thoni,Deborah	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
747	Tiercy,Jean-Marie	POS	POS	POS	POS	B*002-*004/ *006/ *007	POS	POS	POS	NEG	NEG	POS	NEG	*001/ *002, *003-*007	POS	POS	*002/ *004, *00301/ *00302	SSP
5451	Tilanus,Marcel	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
4021	Trachtenberg,Eliz	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
8024	Trowsdale,John	POS	*004	POS	NT	POS	POS	NT	POS	NEG	NEG	POS	NEG	FULL, DEL	POS	POS	*001/ *002/ *004, *003	SSP
5462	Turner,E.V.	POS	POS	POS	POS	B	*004	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	*001-*006	SSP
8053	Tyan,Dolly	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	*001/ *002, *003-*007	POS	POS	*001/ *002/ *004, *003	SSP
8028	Uhrberg,Markus	POS	POS	POS	NT	POS	POS	POS	NT	NEG	NEG	POS	NEG	POS	POS	NT	NT	SSP
3775	Vidan-Jeras,Blan	POS	POS	POS	POS	B	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP

Table 5. KIR Exchange Sample: KDNA #84 (Unknown)

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
8023	Vilches, Carlos	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	FULL, DEL	POS	POS	FULL, DEL	SSP
8047	Wassmuth, Ralf	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
705	Watkins, David I.	POS	POS	POS	POS	B*002/ *004/ *007	POS	POS	POS	NEG	NEG	POS	NEG	*001-*004/ *006/ *007	POS	POS	*001-*004	SSP
1466	Yu, Neng	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	RSSOP
5282	Yu_Neng/UMMHC	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP
713	Zachary, Andrea	POS	POS	POS	POS	B*002/ *004/ *007	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	SSP

PARTICIPATING CENTERS

Name			City/State	Country	Name			City/State	Country
Adams	Sharon		Bethesda MD		Lee	Jar-How	Dr	Canoga Park CA	
Baxter-Lowe	Lee Ann	Dr	San Francisco CA		Linke	Robert	PhD	Stamford CT	
Carrington/Martin		Drs	Frederick MD		Marino	Susana R		Chicago IL	
Chan	Soh Ha	Prof	Singapore	Singapore	Marsh	Steven	Dr	London	England
Charlton	Ronald	PhD	Jacksonville FL		Mytilineos	Joannis	MD	Ulm	Germany
Chen	Dongfeng	Dr	Durham NC		Noreen	Harriet		Minneapolis MN	
Christiansen/Witt			Perth	Australia	Olerup	Olle		Saltsjobaden	Sweden
Colombe	Beth	PhD	Philadelphia PA		Permpikul/Vejbaesya		Drs	Bangkok	Thailand
Costeas	Paul A.	Dr	Nicosia	Cyprus	Pidwell/Askar			Cleveland OH	
Crowe	Deborah	PhD	Nashville TN		Ray/Balazs			Stamford CT	
Davidson/Poulton		Drs	Manchester	England	Reed/Rajalingam		Drs	Los Angeles CA	
Dinauer	David		Brown Deer WI		Roberts	Chrissy H.		London	England
Dunckley	Heather	PhD	Sydney NSW	Australia	Rost/Klein		Drs	Martinsried	Germany
Ellis	Thomas	PhD	Milwaukee WI		Sauer/Gottwald	Norbert		Lich	Germany
Endres	Robert	Drs	Tempe AZ		Schroeder	M.L.	MD	Winnipeg MB	Canada
Fagoaga	Omar	Dr	Detroit MI		Senitzer	David	PhD	Duarte CA	
Fernandez-Vina/Cano		Drs	Houston TX		Tavoularis	Sofia	Dr	Ottawa ON	Canada
Fischer/Mayr		Drs	Vienna	Austria	Thoni	Deborah	MD	Orlando FL	
Gardiner	Clair	PhD	Dublin	Ireland	Tiercy	Jean-Marie	Dr	Geneva	Switzerland
Gillespie	Kathleen	Dr	Bristol	UK	Tilanus	Marcel	Dr	Maastricht	Germany
Gladman/Pellett/Pollack			Toronto ON	Canada	Trachtenberg	Elizabeth	PhD	Oakland CA	
Gomez	Carmen		Miami FL		Trowsdale	John	Prof	Cambridge	UK
Graff	Ralph J.	Dr	St Louis MO		Turner	E.V.	PhD	Memphis TN	
Han	Hoon	Dr	Seoul	S. Korea	Tyan	Dolly	Dr	Palo Alto	
Hidajat	Melanny		Brugge	Belgium	Uhrberg	Markus	Dr	Dusseldorf	Germany
Holdsworth	Rhonda		South Melbourne	Australia	Vidan-Jeras	Blanka		Ljubljana	Slovenia
Hsu	Susan H.	PhD	Philadelphia PA		Vilches	Carlos	Dr	Madrid	Spain
Hurley/Hartzman		Drs	Rockville MD		Wassmuth	Ralf	Prof	Dresden	Germany
Kim	Tai-Gyu	Prof	Seoul	S. Korea	Watkins	David	PhD	Madison WI	
Kotsch	Katja	PhD	Berlin	Germany	Yu	Neng	MD	Dedham MA	
KuKuruga	Debra	PhD	Baltimore MD		Yu	Neng	MD	Worcester MA	
Kusnierczyk	Piotr		Wroclaw	Poland	Zachary	Andrea	PhD	Baltimore MD	
Lanzer	G.	Prof	Graz	Austria					