REPORT OF THE 30th UCLA INTERNATIONAL MICA EXCHANGE
OCTOBER 19, 2016

MICA	117–120

For the 30th MICA Exchange, 4 DNA samples (MICA#117-MICA#120) were shipped to 17 laboratories worldwide. MICA typing results were received from all 17 laboratories. Results for MICA Exchange 30 are summarized in Table 1 and individual laboratory results are shown in Tables 2-5.

MICA#117. MICA*002 and MICA*045 were the assigned types for this sample from a Filipino donor. MICA*002 was reported by 4 labs, with SBT and 1 SSO lab assigning MICA*002:01. The remainder of the labs (n = 13) were unable to distinguish MICA*002 from among MICA*020, MICA*045, MICA*055, MICA*068, MICA*081, and MICA*086. MICA*002, MICA*020 and MICA*055 are identical in their cellular domains, but differ in their transmembrane domains (exon 5) by the number of GCT repeats. MICA*002 has 9 GCT repeats, MICA*020 has 10 GCT repeats, and MICA*055 has 8 GCT repeats. MICA*045 and MICA*081 differ from MICA*002 by a single nucleotide substitution in exon 4. For MICA*045, the substitution lies at codon 251 (CAA→GAA), which results in an amino acid change from glutamine in MICA*002 to glutamic acid in MICA*045. For MICA*081, the substitution is at codon 245 (GTG→GCG), resulting in an amino acid change from valine to alanine in MICA*081. MICA*045 was well assigned (88%) as the second MICA type.

MICA#118. The reported MICA types for this sample from a Filipino donor were MICA*012 and MICA*012/*018. MICA*012 was reported by 16 labs, with SBT and 2 SSO labs reporting MICA*012:01. Five labs reported this sample as being homozygous for MICA*012. One lab reporting by SSP assigned MICA*018 as the second MICA type, while the remainder of the labs (n = 11) assigned MICA*012/*018. MICA*018 differs from MICA*012 in exon 3 at codon 156 by a single nucleotide substitution (CTC→CAC), which results in an amino acid change from leucine to histidine.

MICA#119. MICA*011 and MICA*015 were the consensus types for this sample from a Hispanic donor. Each were assigned in complete consensus by all 17 labs. This sample was previously studied in the Cell Exchange as cell 1565 (same as cell 1504, 1357) and extract 508 (same as ext 436). The class I type of this cell was reported as A*24:02, A*33:05, B*14:02, B*45:01, C*08:02, C*16:01.

MICA#120. The reported MICA types for this sample from a Hispanic donor were MICA*010/*069 and MICA*018. MICA*010 was reported by 5 labs, with 3 labs assigning MICA*010:01. MICA*010/*069 was reported by 10 labs, 1 lab reported MICA*010/*019/*069, and another lab reported MICA*019:01/*019:02. MICA*019 differs from MICA*010 in exon 2 by a single nucleotide substitution at codon 6 (CCT→CGT), which results in an amino acid substitution of proline with arginine in MICA*019. In turn, MICA*069 differs from MICA*010 in exon 6 at codon 350 (GCT→GAT), where alanine is replaced with aspartic acid in MICA*069. MICA*018 (94%) was well assigned as the second MICA type, with 7 labs assigning MICA*018:01.

NEXT MAILING DATE: *February 8, 2017*

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Table 1. Summary of 30th MICA Exchange #117-#120

MICA#117	
17 labs	
Allele-1	**%(n)**
*002:01	17(3)
*002	6 (1)
*002/*020/*045	12(2)
*002:01/*002:03/*020/*055	6 (1)
*002/*020/*055/*081	24(4)
*002/*020/*055/*068/*081	6 (1)
*002/*020/*055/*081/*086	29(5)
Allele-2	**%(n)**
*045	88(15)
*045/*055/*081	6 (1)
*045/*055/*081/*086	6 (1)

MICA#118	
17 labs	
Allele - 1	**%(n)**
*012:01	23(4)
*012	59(10)
*012:01/*012:05	12(2)
*012/*018	6 (1)
Allele - 2	**%(n)**
*012:01	17(3)
*012	12(2)
*018	6 (1)
*012:01/*018:01	6 (1)
*012:01/*012:05/*018:01	12(2)
*012/*018	47(8)

MICA#119	
17 labs	
Allele - 1	**%(n)**
*011	100(17)
Allele - 2	**%(n)**
*015	100(17)

MICA#120	
17 labs	
Allele - 1	**%(n)**
*010:01	18(3)
*010	12(2)
*010:01/*069	12(2)
*010/*069	47(8)
*010/*019/*069	6 (1)
*019:01/*019:02	6 (1)
Allele - 2	**%(n)**
*018:01	41(7)
*018	53(9)
*018/*025	6 (1)

Table 2. MICA typing results reported by participating laboratories.						
MICA # 117 (Filipino)	**CTR**	**Investigator**	**Allele-1**	**Allele-2**	**Others**	**Method**
	3224	Chen, Dong-Feng	*002/*020/*055/*081/*086	*045		SSO
	2549	Fagoaga, Omar	*002/*020/*055/*081	*045		SSO
	234	Fernandez, Casiana	*002:01/*020/*045	*045/*055/*081/*086		SSO
	762	Fischer, Gottfried	*002:01	*045		SBT
	8035	Kanangat, Siva	*002/*020/*045	*045/*055/*081		
	4337	Kim, Tai-Gyu	*002:01/*002:03/*020/*055	*045		SSP
	836	KuKuruga, Debra	*002/*020/*055/*081	*045		SSO
	278	Lee, Jar-How	*002:01/*020/*055/*081/*086	*045		SSO
	759	Lopez-Cepero, Mayra	*002/*020/*055/*068/*081	*045		SSO
	8067	Marino, Susana R.	*002:01/*002:03/*020/*055/*081	*045		SSO
	733	Mytilineos, Joannis	*002:01	*045	*052	SBT
	5231	Nelson, Karen	*002/*020/*055/*081/*086	*045		SSO
	3966	Permpikul, Vejbaesya &	*002	*045		SSP
	8030	Poulton, Kay	*002:01	*045	*002:03/*020/*055/*081	SSO
	3753	Reed, Elaine F.	*002/*020/*055/*081	*045		SSO
	3798	Reinsmoen, Nancy L.	*002/*020/*055/*081/*086	*045		SSO
	16	Zhang, Aiwen	*002/*020/*055/*081/*086	*045		SSO

Table 3. MICA typing results reported by participating laboratories.						
MICA # 118 (Filipino)	CTR	Investigator	Allele-1	Allele-2	Others	Method
	3224	Chen, Dong-Feng	*012	*012/*018		SSO
	2549	Fagoaga, Omar	*012	*012/*018		SSO
	234	Fernandez, Casiana	*012:01/*012:AE	*012:AE/*018:01	AE=01/05	SSO
	762	Fischer, Gottfried	*012:01			SBT
	8035	Kanangat, Siva	*012	*012/*018		
	4337	Kim, Tai-Gyu	*012	*012		SSP
	836	KuKuruga, Debra	*012	*012/*018		SSO
	278	Lee, Jar-How	*012:01/*012:05	*012:01/*012:05/*018:01		SSO
	759	Lopez-Cepero, Mayra	*012	*012/*018		SSO
	8067	Marino, Susana R.	*012:01	*012:01/*018:01		SSO
	733	Mytilineos, Joannis	*012:01			SBT
	5231	Nelson, Karen	*012	*012/*018		SSO
	3966	Permpikul, Vejbaesya &	*012	*018		SSP
	8030	Poulton, Kay	*012:01	*012:01	*018:01	SSO
	3753	Reed, Elaine F.	*012	*012/*018		SSO
	3798	Reinsmoen, Nancy L.	*012	*012/*018		SSO
	16	Zhang, Aiwen	*012/*018			SSO

Table 4. MICA typing results reported by participating laboratories.						
MICA # 119 **(Hispanic)**	**CTR**	**Investigator**	**Allele-1**	**Allele-2**	**Others**	**Method**
	3224	Chen, Dong-Feng	*011	*015		SSO
	2549	Fagoaga, Omar	*011	*015		SSO
	234	Fernandez, Casiana	*011	*015		SSO
	762	Fischer, Gottfried	*011	*015		SBT
	8035	Kanangat, Siva	*011	*015		
	4337	Kim, Tai-Gyu	*011	*015		SSP
	836	KuKuruga, Debra	*011	*015		SSO
	278	Lee, Jar-How	*011	*015		SSO
	759	Lopez-Cepero, Mayra	*011	*015		SSO
	8067	Marino, Susana R.	*011	*015		SSO
	733	Mytilineos, Joannis	*011	*015		SBT
	5231	Nelson, Karen	*011	*015		SSO
	3966	Permpikul, Vejbaesya &	*011	*015		SSP
	8030	Poulton, Kay	*011	*015		SSO
	3753	Reed, Elaine F.	*011	*015		SSO
	3798	Reinsmoen, Nancy L.	*011	*015		SSO
	16	Zhang, Aiwen	*011	*015		SSO

Table 5. MICA typing results reported by participating laboratories.						
MICA # 120 **(Hispanic)**	**CTR**	**Investigator**	**Allele-1**	**Allele-2**	**Others**	**Method**
	3224	Chen, Dong-Feng	*010/*069	*018		SSO
	2549	Fagoaga, Omar	*010/*069	*018		SSO
	234	Fernandez, Casiana	*019:AB	*018:01	AB=01/02	SSO
	762	Fischer, Gottfried	*010:01	*018:01		SBT
	8035	Kanangat, Siva	*010/*069	*018		
	4337	Kim, Tai-Gyu	*010	*018:01		SSP
	836	KuKuruga, Debra	*010/*019/*069	*018/*025		SSO
	278	Lee, Jar-How	*010:01/*069	*018:01		SSO
	759	Lopez-Cepero, Mayra	*010/*069	*018		SSO
	8067	Marino, Susana R.	*010:01/*069	*018:01		SSO
	733	Mytilineos, Joannis	*010:01	*018:01	*069	SBT
	5231	Nelson, Karen	*010/*069	*018		SSO
	3966	Permpikul, Vejbaesya &	*010	*018		SSP
	8030	Poulton, Kay	*010:01	*018:01	*069	SSO
	3753	Reed, Elaine F.	*010/*069	*018		SSO
	3798	Reinsmoen, Nancy L.	*010/*069	*018		SSO
	16	Zhang, Aiwen	*010/*069	*018		SSO