

# REPORT OF THE 34<sup>th</sup> UCLA INTERNATIONAL MICA EXCHANGE

## MAY 2, 2018

MICA

133–136

For the 34<sup>th</sup> MICA Exchange, 4 DNA samples (MICA#133-MICA#136) were shipped to 22 laboratories worldwide. MICA typing results were re-

ceived from all 22 laboratories. Results for MICA Exchange 34 are summarized in Table 1 and individual laboratory results are shown in Tables 2-5.

**MICA#133.** The reported consensus type for this sample from an African American donor is MICA\*002 and MICA\*004. MICA\*002 was reported by 9 labs, with 7 labs assigning MICA\*002:01. A number labs (n=13) were unable to resolve MICA\*002 from MICA\*020 and MICA\*055. MICA\*002, MICA\*020, and MICA\*055 differ from each other by the number of GCT repeats in their transmembrane domains (exon 5), in which MICA\*002 has 9 GCT repeats, MICA\*020 has 10 GCT repeats, and MICA\*055 has 8 GCT repeats. MICA\*004 was assigned in complete consensus as the second MICA allele.

**MICA#134.** The reported consensus type for this sample from an Asian donor is MICA\*006 and MICA\*010. MICA\*006 was assigned by all but 1 lab, which misassigned MICA\*009:01. MICA\*010 was reported by 10 labs, with 7 labs assigning MICA\*010:01. MICA\*010/\*069 was assigned by 12 labs. MICA\*069 differs from MICA\*010:01 in exon 6 by a single nucleotide substitution at codon 350 (GCT→GAT), resulting in an amino acid change from alanine to aspartic acid in MICA\*069.

**MICA#135.** The reported consensus type for this sample from a donor of mixed Caucasian and Hispanic heritage is MICA\*007 and MICA\*009. MICA\*007 was assigned by 10 labs, with 6 labs reporting MICA\*007:01. MICA\*007/\*026 was assigned by 11 labs. MICA\*007:01 differs from MICA\*026 by the number of GCT repeats in exon 5, where MICA\*007:01 has 4 GCT repeats and MICA\*026 has 6 GCT repeats. MICA\*009 was assigned by 9 labs, with 8 labs assigning MICA\*009:01. MICA\*009/\*049 was assigned by 13 labs. MICA\*049 differs from MICA\*009:01 in exon 6 by a single nucleotide substitution at codon 333 (ACG → ATG), which results in an amino acid change from threonine to methionine in MICA\*049.

**MICA#136.** This sample from a Filipino donor is presumed homozygous for MICA\*019. MICA\*019 was reported in complete consensus, with 14 labs assigning MICA\*019:01. Cereb noted this sample “has a mutation (2009G > A in intron 5) in one of the 019:01 alleles.” This cell was studied in the Cell Exchange as cell 1516 (2014). The class I type was reported as A\*11:01-A\*34:01-B\*15:02-B\*15:21-C\*04:03-C\*08:01.

**NEXT MAILING DATE: May 16, 2018**

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**Table 1. Summary of 34<sup>th</sup> MICA Exchange #133-#136**

<b>MICA#133</b>	
22 labs	
<b>Allele-1</b>	<b>%(n)</b>
*002:01	32(7)
*002:01/*002:02	5 (1)
*002	5 (1)
*002/*020	5 (1)
*002:01/*020/*055	27(6)
*002/*020/*055	27(6)
22 labs	
<b>Allele-2</b>	<b>%(n)</b>
*004	100(22)

<b>MICA#134</b>	
22 labs	
<b>Allele - 1</b>	<b>%(n)</b>
*006	95(22)
*009:01	5(1)
22 labs	
<b>Allele - 2</b>	<b>%(n)</b>
*010:01	32(7)
*010	14(3)
*010:01/069	27(76)
*010/069	23(5)
*010:01/*065/*069	4 (1)

<b>MICA#135</b>	
22 labs	
<b>Allele - 1</b>	<b>%(n)</b>
*007:01	27(6)
*007:01/*007:02	5 (1)
*007	14(3)
*007:01/*026	5 (1)
*007:01/*007:07/*026	18(4)
*007:AH/*026	5 (1)
*007/*026	23(5)
*007/*009/*026	5 (1)
22 labs	
<b>Allele - 2</b>	<b>%(n)</b>
*009:01	36(8)
*009	5 (1)
*009:01/*049	32(7)
*009/*049	23(5)
*009/*026/*049	5 (1)

<b>MICA#136</b>	
22 labs	
<b>Allele - 1</b>	<b>%(n)</b>
*019:01	64(14)
*019	36(8)
22 labs	
<b>Allele - 2</b>	<b>%(n)</b>

**Table 2. MICA typing results reported by participating laboratories.**

MICA# 133 (Black)	CTR	Allele-1	Allele-2	Others	Method
	234	*002:01/*020/*055	*004		SSO
	278	*002:01	*004		
	733	*002:01	*004		
	735	*002	*004	*020/*055	SSO
	762	*002:01	*004		SBT
	836	*002/*020/*055	*004		SSO
	1426	*002:01/*020/*055	*004		SSO
	2549	*002:01/*020/*055	*004		SSO
	3224	*002:01/*020/*055	*004		SSO
	3753	*002/*020/*055	*004		SSO
	3798	*002/*020/*055	*004		SSO
	3966	*002/*020	*004	*055	SSO
	4337	*002/*020/*055	*004		SSP
	5000	*002/*020/*055	*004		SSO
	5231	*002:01/*020/*055	*004		SSO
	8030	*002:01	*004	*020, 055	SSO
	8035	*002/*020/*055	*004		SSO
	8047	*002:01/*002:02	*004		NGS
	8080	*002:01/*020/*055	*004		SSO
	8086	*002:01	*004		SBT
	8105	*002:01	*004		NGS
	8108	*002:01	*004		SSO

**Table 3. MICA typing results reported by participating laboratories.**

MICA# 134 (Asian)	CTR	Allele-1	Allele-2	Others	Method
	234	*006	*010:01/*069		SSO
	278	*006	*010:01		
	733	*006	*010:01	*010:02/*069	
	735	*006	*010	*069	SSO
	762	*006	*010:01		SBT
	836	*006	*010/*069		SSO
	1426	*006	*010:01/*069		SSO
	2549	*006	*010:01/*069		SSO
	3224	*006	*010:01/*069		SSO
	3753	*006	*010/*069		SSO
	3798	*006	*010/*069		SSO
	3966	*006	*010	*019, *069	SSO
	4337	*009:01	*010		SSP
	5000	*006	*010/*069		SSO
	5231	*006	*010:01/*069		SSO
	8030	*006	*010:01	*069	SSO
	8035	*006	*010/*069		SSO
	8047	*006	*010:01/*065/*069		NGS
	8080	*006	*010:01/*069		SSO
	8086	*006	*010:01		SBT
	8105	*006	*010:01		NGS
	8108	*006	*010:01		SSO

**Table 4. MICA typing results reported by participating laboratories.**

<b>MICA# 135 (Caucasian/ Hispanic)</b>	<b>CTR</b>	<b>Allele-1</b>	<b>Allele-2</b>	<b>Others</b>	<b>Method</b>
	234	*007:01/*007:07/*026	*009:01/*049		SSO
	278	*007	*009:01		
	733	*007:01	*009:01	*049	
	735	*007	*009	*026, *049	SSO
	762	*007:01	*009:01		SBT
	836	*007/*026	*009/*049		SSO
	1426	*007:01/*007:07/*026	*009:01/*049		SSO
	2549	*007:01/*007:07/*026	*009:01/*049		SSO
	3224	*007:AH/*026	*009:01/*049		SSO
	3753	*007/*026	*009/*049		SSO
	3798	*007/*026	*009/*049		SSO
	3966	*007/*026	*009/*049		SSO
	4337	*007	*009:01		SSP
	5000	*007/*026	*009/*049		SSO
	5231	*007:01/*007:07/*026	*009:01/*049		SSO
	8030	*007:01	*009:01	*026, *049	SSO
	8035	*007/*009/*026	*009/*026/*049		SSO
	8047	*007:01/*007:02	*009:01/*049		NGS
	8080	*007:01/*026	*009:01/*049		SSO
	8086	*007:01	*009:01		SBT
	8105	*007:01	*009:01		NGS
	8108	*007:01	*009:01		SSO

**Table 5. MICA typing results reported by participating laboratories.**

<b>MICA# 136 (Filipino)</b>	<b>CTR</b>	<b>Allele-1</b>	<b>Allele-2</b>	<b>Others</b>	<b>Method</b>
	234	*019:01	*019:01		SSO
	278	*019:01	*019:01		
	733	*019:01			
	735	*019	*019		SSO
	762	*019:01			SBT
	836	*019			SSO
	1426	*019:01	*019:01		SSO
	2549	*019:01	*019:01		SSO
	3224	*019:01			SSO
	3753	*019	*019		SSO
	3798	*019	*019		SSO
	3966	*019	*019		SSO
	4337	*019	*019		SSP
	5000	*019	*019		SSO
	5231	*019:01	*019:01		SSO
	8030	*019:01			SSO
	8035	*019			SSO
	8047	*019:01	*019:01		NGS
	8080	*019:01	*019:01		SSO
	8086	*019:01	*019:01		SBT
	8105	*019:01	*019:01		NGS
	8108	*019:01	*019:01		SSO