REPORT OF THE 37th UCLA INTERNATIONAL MICA EXCHANGE
MAY 9, 2019

MICA	145–150

For the 37th MICA Exchange, 6 DNA samples (MICA#145-MICA#150) were shipped to 22 laboratories worldwide. MICA typing results were received from 22 laboratories. Results for MICA Exchange 37 are summarized in Table 1 and individual laboratory results are shown in Tables 2-7.

MICA#145. MICA*001 and MICA*008 was the reported consensus type for this sample from a Caucasian donor. MICA*001 and MICA*008 were each reported in complete consensus. Reported subtypes for MICA*008 were MICA*008:04 (27%) and MICA*008:01 (10%). A few labs (n=4) were unable to resolve MICA*008:01 from either MICA*008:03 or MICA*008:04. MICA*008:04 differs from MICA*008:01 by a single nucleotide substitution (TTC→TTT) in exon 1, which results in a synonymous substitution. MICA*008:03 differs from MICA*008:01 in exon 4 by a single nucleotide substitution at codon 193 (GCC→GCA), resulting in a synonymous substitution.

MICA#146. MICA*002 and MICA*011 was the reported consensus type for this sample from a donor of mixed heritage. MICA*002 was reported by 11 labs, with 8 labs reporting MICA*002:01. A number of labs (n=11) were unable to resolve MICA*002 from MICA*020, MICA*055, and MICA*086. MICA*020 and MICA*055 differ from MICA*002 by the number of GCT repeats in their transmembrane domains (exon 5), where MICA*002 has 9 GCT repeats, MICA*020 has 10 GCT repeats, and MICA*055 has 8 GCT repeats. Whereas, MICA*086 differs from MICA*002 by a single nucleotide substitution in exon 3 at codon 130 (CCC → TCC), resulting in an amino acid substitution from proline to serine. MICA*011 was assigned by 100%.

MICA#147. MICA*007 and MICA*072 was the reported consensus type for this sample from a Caucasian donor. MICA*007 was reported by 12 labs, with 7 labs assigning MICA*007:01. MICA*007/*026 was reported by 10 labs. MICA*026 and MICA*007 are identical in their extracellular domains, but differ by the number of GCT repeats in their transmembrane domains (exon 5) where MICA*007 has 4 GCT repeats and MICA*026 has 6 GCT repeats. MICA*072 (95%) was reported as the second MICA allele present. MICA*072 /*002/*020/*055/*086 was reported by 1 lab.

MICA#148. MICA*008 and MICA*018 was the reported consensus type for this sample from a Hispanic donor. MICA*008 was reported by 95%, with 6 labs assigning MICA*008:04 and 2 labs assigning MICA*008:01. A few labs (n=4) were unable to resolve MICA*008:01 from MICA*008:03 or MICA*008:04, as 1 lab reported MICA*008:01/*008:03 and 3 labs reported MICA*008:01/*008:04. MICA*018 was reported in complete consensus as the second MICA allele, with 11 labs assigning MICA*018:01.

MICA#149. MICA*009 and MICA*068 was the reported consensus type for this sample from a Hispanic donor. MICA*009 was assigned by 11 labs, 8 of which assigned MICA*009:01. The remainder of the labs (n = 11) reported MICA*009/*049. MICA*009 and MICA*049 differ by a single nucleotide substation in exon 6 at codon 333, where threonine (ACG) in MICA*009 is replaced by methionine (ATG) in MICA*049. MICA*068 was reported by 90% as the second MICA allele present. One lab was unable to resolve MICA*068 from MICA*002, MICA*020, and MICA*055, and 1 lab assigned MICA*002/*020/*055.

MICA#150. MICA*004 was the reported consensus type for this sample from a Hispanic donor. All 22 labs reported this sample as homozygous for MICA*004.

NEXT MAILING DATE: August 7, 2019

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Table 1. Summary of 37th MICA Exchange #145-#150

MICA#145

22 labs	
Allele-1	**%(n)**
*001	100(22)

22 labs	
Allele-2	**%(n)**
*008:01:01	5 (1)
*008:04	27(6)
*008:01	5 (1)
*008	45(10)
*008:01/*008:04	5 (1)
*008:01:01/*008:01:02/*008:04	9 (2)
*008:01:01/*008:01:02/*008:03	5 (1)

MICA#146

22 labs	
Allele - 1	**%(n)**
*002:01	36(8)
*002	9 (2)
*002:01/*002:02	5 (1)
*002/*020/*055	5 (1)
*002/*020/*055/*086	32(7)
*002:01/*002:03/*020/*055/*086	13(3)

22 labs	
Allele - 2	**%(n)**
*011	100(22)

MICA#147

22 labs	
Allele - 1	**%(n)**
*007:01	32(7)
*007	18(4)
*007:01/*007:02	5 (1)
*007:01/*007:07/*026	13(3)
*007/*026	32(7)

22 labs	
Allele - 2	**%(n)**
*072	95(21)
*072/*002/*020/*055/*086	5 (1)

MICA#148

22 labs	
Allele-1	**%(n)**
*008:01:01	5 (1)
*008:04	27(6)
*008:01	5 (1)
*008	40(9)
*024	5 (1)
*008:01/*008:04	5 (1)
*008:01:01/*008:01:02/*008:03	5 (1)
*008:01:01/*008:01:02/*008:04	9 (2)

22 labs	
Allele-2	**%(n)**
*018:01	50(11)
*018	45(10)
*018:01/*018:02	5 (1)

MICA#149

22 labs	
Allele - 1	**%(n)**
*009:01	36(8)
*009	14(3)
*009:01/*049	18(4)
*009/*049	32(7)

22 labs	
Allele - 2	**%(n)**
*068	90(20)
*068/*002/*020/*055	5 (1)
*002/*020/*055	5 (1)

MICA#150

22 labs	
Allele - 1	**%(n)**
*004	100(22)

Table 2. MICA typing results reported by participating laboratories.					
MICA# 145 (Caucasian)	CTR	Allele-1	Allele-2	Others	Method
	234	*001	*008:01/*008:04		SSO
	278	*001	*008:01	*008:04	
	733	*001	*008:01:01	*008:01:02, 008:04	SBT
	735	*001	*008		SSO
	762	*001	*008:04		SBT
	1426	*001	*008:01:01/*008:01:02/*008:04		SSO
	2549	*001	*008		SSO
	3224	*001	*008		SSO
	3753	*001	*008		SSO
	3798	*001	*008		SSO
	3966	*001	*008		SSO
	4337	*001	*008		SSP
	5000	*001	*008		SSO
	5133	*001	*008:04	Codon 293 STR allele 1. A4	NGS
	5231	*001	*008:01:01/*008:01:02/*008:04		SSO
	8035	*001	*008		SSO
	8047	*001	*008:01:01/*008:01:02/*008:03	*008:04	NGS
	8073	*001	*008:04		NGS
	8080	*001	*008:04		NGS
	8086	*001	*008:04		SBT
	8105	*001	*008:04		NGS
	8108	*001	*008		SSO

Table 3. MICA typing results reported by participating laboratories.					
MICA# 146 (Mixed)	CTR	Allele-1	Allele-2	Others	Method
	234	*002:01/*002:03/*020/*055/*086	*011		SSO
	278	*002:01	*011	*002:03	
	733	*002:01	*011		SBT
	735	*002	*011	*020/*055/*086	SSO
	762	*002:01	*011		SBT
	1426	*002:01/*002:03/*020/*055/*086	*011		SSO
	2549	*002/*020/*055/*086	*011		SSO
	3224	*002/*020/*055/*086	*011		SSO
	3753	*002/*020/*055/*086	*011		SSO
	3798	*002/*020/*055/*086	*011		SSO
	3966	*002/*020/*055/*086	*011		SSO
	4337	*002/*020/*055	*011		SSP
	5000	*002/*020/*055/*086	*011		SSO
	5133	*002:01	*011		NGS
	5231	*002:01/*002:03/*020/*055/*086	*011		SSO
	8035	*002/*020/*055/*086	*011		SSO
	8047	*002:01/*002:02	*011		NGS
	8073	*002:01	*011		NGS
	8080	*002:01	*011		NGS
	8086	*002:01	*011		SBT
	8105	*002:01	*011		NGS
	8108	*002	*011	*020, *055, *086	SSO

Table 4. MICA typing results reported by participating laboratories.					
MICA# 147 (Caucasian)	CTR	Allele-1	Allele-2	Others	Method
	234	*007:01/*007:07/*026	*072		SSO
	278	*007	*072		
	733	*007:01	*072		SBT
	735	*007	*072	*026	SSO
	762	*007:01	*072		SBT
	1426	*007:01/*007:07/*026	*072		SSO
	2549	*007/*026	*072		SSO
	3224	*007/*026	*072		SSO
	3753	*007/*026	*072		SSO
	3798	*007/*026	*072		SSO
	3966	*007/*026	*072/*002/*020/*055/*086		SSO
	4337	*007	*072		SSP
	5000	*007/*026	*072		SSO
	5133	*007:01	*072		NGS
	5231	*007:01/*007:07/*026	*072		SSO
	8035	*007/*026	*072		SSO
	8047	*007:01/*007:02	*072		NGS
	8073	*007:01	*072		NGS
	8080	*007:01	*072		NGS
	8086	*007:01	*072		SBT
	8105	*007:01	*072		NGS
	8108	*007	*072	*026	SSO

Table 5. MICA typing results reported by participating laboratories.					
MICA# 148	**CTR**	**Allele-1**	**Allele-2**	**Others**	**Method**
(Hispanic)	234	*008:01/*008:04	*018:01		SSO
	278	*008:01	*018:01	*008:04	
	733	*008:01:01	*018:01	*008:01:02, *008:04	SBT
	735	*024	*018		SSO
	762	*008:04	*018:01		SBT
	1426	*008:01:01/*008:01:02/*008:04	*018:01		SSO
	2549	*008	*018		SSO
	3224	*008	*018		SSO
	3753	*008	*018		SSO
	3798	*008	*018		SSO
	3966	*008	*018		SSO
	4337	*008	*018		SSP
	5000	*008	*018		SSO
	5133	*008:04	*018:01		NGS
	5231	*008:01:01/*008:01:02/*008:04	*018:01		SSO
	8035	*008	*018		SSO
	8047	*008:01:01/*008:01:02/*008:03	*018:01/*018:02	*008:04	NGS
	8073	*008:04	*018:01		NGS
	8080	*008:04	*018:01		NGS
	8086	*008:04	*018:01		SBT
	8105	*008:04	*018:01		NGS
	8108	*008	*018		SSO

Table 6. MICA typing results reported by participating laboratories.					
MICA# 149	**CTR**	**Allele-1**	**Allele-2**	**Others**	**Method**
(Hispanic)	234	*009:01/*049	*068		SSO
	278	*009:01	*068		
	733	*009:01	*068		SBT
	735	*009	*068	*049	SSO
	762	*009:01	*068		SBT
	1426	*009:01/*049	*068		SSO
	2549	*009/*049	*068		SSO
	3224	*009/*049	*068		SSO
	3753	*009/*049	*068		SSO
	3798	*009/*049	*068		SSO
	3966	*009/*049	*068/*002/*020/*055		SSO
	4337	*009	*002/*020/*055		SSP
	5000	*009/*049	*068		SSO
	5133	*009:01	*068		NGS
	5231	*009:01/*049	*068		SSO
	8035	*009/*049	*068		SSO
	8047	*009:01/*049	*068		NGS
	8073	*009:01	*068		NGS
	8080	*009:01	*068		NGS
	8086	*009:01	*068		SBT
	8105	*009:01	*068		NGS
	8108	*009	*068	*049	SSO

Table 7. MICA typing results reported by participating laboratories.					
MICA# 150	CTR	Allele-1	Allele-2	Others	Method
(Hispanic)	234	*004	*004		SSO
	278	*004	*004		
	733	*004			SBT
	735	*004	*004		SSO
	762	*004			SBT
	1426	*004	*004		SSO
	2549	*004	*004		SSO
	3224	*004	*004		SSO
	3753	*004	*004		SSO
	3798	*004	*004		SSO
	3966	*004	*004		SSO
	4337	*004	*004		SSP
	5000	*004	*004		SSO
	5133	*004	*004		NGS
	5231	*004	*004		SSO
	8035	*004	-		SSO
	8047	*004	*004		NGS
	8073	*004			NGS
	8080	*004	*004		NGS
	8086	*004	-	MICA-Null	SBT
	8105	*004			NGS
	8108	*004			SSO