REPORT OF THE 50th INTERNATIONAL MICA EXCHANGE DECEMBER 1, 2025

MICA 223 - 228

For the 50th MICA Exchange, 6 DNA samples (MICA #223 - MICA#228) were shipped to 18 laboratories worldwide. MICA typing results were received

from 17 of those laboratories. Results are summarized on Table 1 and individual laboratory results are listed on tables 2 - 7.

MICA #223. MICA*006 (A6)-MICA*016 (A5) was the reported MICA genotype type for this sample from a Hispanic donor. This sample was previously examined as MICA sample #187 (2022) and #109 (2016).

In this present retying, MICA*006 was well assigned by 100% of labs. MICA*016 was assigned by 16 labs (94%), with 2 labs assigning MICA*016:01:01, and 8 labs assigning MICA*016:01 as the subtypes.

MICA #224. MICA*049 (A6)-MICA*052 (A9) was the reported MICA genotype type for this sample from a Caucasian donor. This sample was previously examined as MICA sample #90 (2014) and #43 (2010).

In this present retyping, MICA*049 was assigned by 14 labs (82%), compared to only 3 labs (18%) assigning it in 2014. MICA*049:01:01 (18%) and MICA*049:01 (35%) were the assigned subtypes. As in the previous study, several labs were unable to resolve MICA*049 from MICA*009. MICA*049 differs from MICA*009 by a single nucleotide substitution in exon 6 at codon 333 (ACG \rightarrow ATG), resulting in an amino acid substitution from threonine \rightarrow methionine. The second MICA allele, MICA*052, was assigned by 16 labs (94%).

MICA #225. MICA*007 (A4)-MICA*029 (A4) was the reported MICA genotype type for this sample from a donor who's ethnicity was unknown. It was previously examined as MICA sample #167 (2020) and #110 (2016).

In this present study, MICA*007 was assigned by 14 labs (82%), with 10 labs assigning MICA*007:01 and 1 lab assigning MICA*007:01:01. MICA*029 was assigned by 16 labs (94%). Among them, 8 labs assigned the subtype as MICA*029:01. One other lab, ctr 5142, identified a novel allele in this sample, noting "MICA*029:01:NEW; MICA*029:01:02 (3681T>C); intron1."

MICA #226. MICA*004 (A6)-MICA*017 (A9) was the reported MICA genotype for this sample from a Caucasian donor. This sample was previously typed in the Exchange as sample #112 (2016).

In this present retyping, MICA*004 was assigned by 15 labs (88%). Among them, 8 labs assigned the subtype as MICA*004:01 and 2 labs assigned MICA*004:01:01. MICA*017 was also assigned by 15 labs (88%), with 10 labs assigning the MICA*017:01 as the subtype.

MICA #227. MICA*009 (A6)-MICA*068 (A9) was the reported MICA genotype for this sample from a Hispanic donor. This sample was previously examined as MICA sample #192 (2022) and #149 (2019).

In this present study, MICA*009 was assigned by 14 labs (82%), with 10 labs assigning MICA*009:01, 1 lab assigning MICA*009:01:01, and 1 lab assigning MICA*009:01:11. The second allele, MICA*068, was assigned by 16 labs (94%). Among them, 7 labs assigned MICA*068:01 and 3 labs assigned MICA*068:01:01 as the subtypes.

MICA #228. MICA*011 (A6)-MICA*016 (A5) was the reported MICA genotype for this sample from a Hispanic donor. This sample was previously examined as MICA sample #193 (2023).

In this present study, MIĆA*011 was assigned by 16 labs (94%), with 7 labs assigning MICA*011:01, 2 labs assigning MICA*011:01:08, and 1 lab assigning MICA*011:01:01. MICA*016 was also assigned by 16 labs (94%). Among the 10 labs reporting subtypes, 7 labs assigned MICA*016:01 and 3 labs assigned MICA*016:01:01.



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Table 1. Summary of the 50th MICA Exchange #223 - #228

MICA#223		
17 labs		
Allele-1	%(n)	
*006	100(16)	
17 labs		
Allele-2	%(n)	
*016:01:01	12(2)	
*016:01	47(8)	
*016	35(6)	
*016/*114/*159/*165/*194/*235/*280	6 (1)	

MICA#226			
17 labs			
Allele - 1	%(n)		
*004:01:01	12(2)		
*004:01	47(8)		
*004	29(5)		
*004/*141/*151/*182/*199/*265/*269	6 (1)		
*004/*006/*009/*049/*105Q/*108/*109	6 (1)		
17 labs			
Allele-2	%(n)		
*017:01	59(10)		
*017	29(5)		
*017/*095/*183/*207/*227/*233/*276	6 (1)		
*002/*020/*023/*052/*055/*089/*090	6 (1)		

MICA#224			
17 labs			
Allele - 1	%(n)		
*049:01:01	18(3)		
*049:01	35(6)		
*049	29(5)		
*009:01/*049:01	6 (1)		
*009/*049/*109/*116	6 (1)		
*009/*049/*105Q/*109/*115/*116/*123	6 (1)		
17 labs			
Allele - 2	%(n)		
*052	94(16)		
*002/*020/*023/*052/*055/*089/*090	6 (1)		

MICA#227		
17 labs		
Allele - 1	%(n)	
*009:01:01	6 (1)	
*009:01:11	6 (1)	
*009:01	59(10)	
*009	12(2)	
*009:01/*049:01	6 (1)	
*009/*049/*109/*116	6 (1)	
*009/049/*105Q/*109/*115/*116/*123	6 (1)	
17 labs		
Allele - 2		
*068:01:01	18(3)	
*068:01	41(7)	
*068	35(6)	
*002/*020/*023/*052/*055/*089/*090	6 (1)	

MICA#225		
17 labs		
Allele - 1	%(n)	
*007:01:01	6 (1)	
*007:01	59(10)	
*007	17(3)	
*007:01/*007:10/*112:02	6 (1)	
*007/*026/*100	6 (1)	
*007/*100/*213/*243/*244/*253/*258	6 (1)	
17 labs		
Allele - 2	%(n)	
*029:01	47(8)	
*029	35(6)	
*029:01/029:02	6 (1)	
*029:01:NEW	6 (1)	
*029/*162/*168	6 (1)	

MICA#228		
17 labs		
Allele - 1	%(n)	
*011:01:08	12(2)	
*011:01:01	6 (1)	
*011:01	41(7)	
*011	35(6)	
*011/*152/*153/*171Q/*188/*254	6 (1)	
17 labs		
Allele - 2	%(n)	
*016:01:01	18(3)	
*016:01	41(7)	
*016	35(6)	
*016/*114/*159/*165/*194/*235/*280	6 (1)	

Table	Table 2. MICA# 223 (Hispanic)					
CTR	Allele-1	Allele-2	Others	Method		
733	*006	*016:01	*016:02	SBT		
762	*006	*016:01		NGS		
3753	*006	*016/*114/*159/*165/*194/*235/*280	Allele-2: *291	SSO		
3798	*006	*016		NGS		
3966	*006	*016		SSP		
4337	*006	*016		SSP		
4345	*006	*016				
5133	*006	*016:01		NGS		
5142	*006	*016:01:01		NGS		
8022	*006	*016:01		NGS		
8035	*006	*016:01		NGS		
8047	*006	*016:01		NGS		
8073	*006	*016:01:01		NGS		
8086	*006	*016		SBT		
8105	*006	*016:01		NGS		
8135	*006	*016:01		NGS		
8137	*006	*016		SBT		

Table	Table 3. MICA# 224 (Caucasian)				
CTR	Allele-1	Allele-2	Others	Method	
733	*049:01:01	*052		SBT	
762	*049:01	*052		NGS	
3753	*009/*049/*105Q/*109/*115/*116/*123	*052		SSO	
3798	*049	*052		NGS	
3966	*049	*052		SSP	
4337	*049	*052		SSP	
4345	*009/*049/*109/*116	*002/*020/*023/*052/*055/*089/*090			
5133	*049:01	*052		NGS	
5142	*049:01:01	*052		NGS	
8022	*049:01	*052		NGS	
8035	*049:01	*052		NGS	
8047	*009:01/*049:01	*052		NGS	
8073	*049:01:01	*052		NGS	
8086	*049	*052	*052	SBT	
8105	*049:01	*052		NGS	
8135	*049:01	*052		NGS	
8137	*049	*052	*052	SBT	

Table	Table 4. MICA# 225 (Unknown)				
CTR	Allele-1	Allele-2	Others	Method	
733	*007:01	*029:01		SBT	
762	*007:01	*029:01		NGS	
3753	*007/*100/*213/*243/*244/*253/*25	*029/*162/*168	Allele-1:*029:02/*112:02/*272/*281	SSO	
3798	*007	*029		NGS	
3966	*007	*029		SSP	
4337	*007	*029		SSP	
4345	*007/*026/*100	*029			
5133	*007:01	*029:01		NGS	
5142	*007:01:01	*029:01:NEW		NGS	
8022	*007:01	*029:01		NGS	
8035	*007:01	*029:01		NGS	
8047	*007:01/*007:10/*112:02	*029:01/029:02		NGS	
8073	*007:01	*029:01		NGS	
8086	*007:01	*029		SBT	
8105	*007:01	*029:01		NGS	
8135	*007:01	*029:01		NGS	
8137	*007:01	*029		SBT	

Table	Table 5. MICA# 226 (Caucasian)				
CTR	Allele-1	Allele-2	Others	Method	
733	*004:01	*017:01	*257	SBT	
762	*004:01	*017:01		NGS	
3753	*004/*141/*151/*182/*199/*265/*269	*017/*095/*183/*207/*227/*233/*276	Allele-1: *287/*289	SSO	
3798	*004	*017		NGS	
3966	*004	*017		SSP	
4337	*004	*017		SSP	
4345	*004/*006/*009/*049/*105Q/*108/*109	*002/*020/*023/*052/*055/*089/*090			
5133	*004:01	*017:01		NGS	
5142	*004:01:01	*017:01		NGS	
8022	*004:01	*017:01		NGS	
8035	*004:01	*017:01		NGS	
8047	*004:01	*017:01		NGS	
8073	*004:01:01	*017:01		NGS	
8086	*004	*017		SBT	
8105	*004:01	*017:01		NGS	
8135	*004:01	*017:01		NGS	
8137	*004	*017		SBT	

Table	Table 6. MICA# 227 (Hispanic)				
CTR	Allele-1	Allele-2	Others	Method	
733	*009:01:01	*068:01:01		SBT	
762	*009:01	*068:01		NGS	
3753	*009/049/*105Q/*109/*115/*116/*123	*068		SSO	
3798	*009	*068		NGS	
3966	*009	*068		SSP	
4337	*009:01	*068		SSP	
4345	*009/*049/*109/*116	*002/*020/*023/*052/*055/*089/*090			
5133	*009:01	*068:01		NGS	
5142	*009:01:11	*068:01:01		NGS	
8022	*009:01	*068:01		NGS	
8035	*009:01	*068:01		NGS	
8047	*009:01/*049:01	*068:01		NGS	
8073	*009:01	*068:01:01		NGS	
8086	*009:01	*068		SBT	
8105	*009:01	*068:01		NGS	
8135	*009:01	*068:01		NGS	
8137	*009:01	*068		SBT	

Table 7.	Table 7. MICA# 228 (Hispanic)				
CTR	Allele-1	Allele-2	Others	Method	
733	*011:01:01	*016:01:01		SBT	
762	*011:01	*016:01		NGS	
3753	*011/*152/*153/*171Q/*188/*254	*016/*114/*159/*165/*194/*235/*280	Allele-2: 291	SSO	
3798	*011	*016		NGS	
3966	*011	*016		SSP	
4337	*011	*016		SSP	
4345	*011	*016			
5133	*011:01	*016:01		NGS	
5142	*011:01:08	*016:01:01		NGS	
8022	*011:01	*016:01		NGS	
8035	*011:01	*016:01		NGS	
8047	*011:01/011:01Q	*016:01		NGS	
8073	*011:01:08	*016:01:01		NGS	
8086	*011	*016		SBT	
8105	*011:01	*016:01		NGS	
8135	*011:01	*016:01		NGS	
8137	*011	*016		SBT	