

# REPORT OF THE 5th UCLA INTERNATIONAL MICA EXCHANGE

## AUGUST 6, 2008

MICA 17-20

Four DNA samples (MICA#017-020) were shipped to participating laboratories on May 7, 2008, and MICA typing results were received from ten laboratories (Table 1). Seven laboratories used a reverse sequence-specific oligonucleotide (rSSO) hybridization method, two laboratories used sequencing-based testing (SBT), and one laboratory used sequence-specific priming (SSP) typing. The two sequencing laboratories also reported the number of GCT-repeats in exon 5.

### **MICA#017 (Hispanic)**

The consensus typing of this sample is MICA\*002 and MICA\*004. MICA\*002 was assigned by Jackson using reverse SSO and MICA\*00201 was reported by Stastny using sequencing-based typing. Seven laboratories did not resolve MICA\*002 from MICA\*020, MICA\*052 or MICA\*055, and one laboratory assigned MICA\* 00901. Both MICA\*004 and MICA\*009 belong to the A6 group and differ by a single amino acid at position 181 (arginine to threonine).

### **MICA#018 (Asian)**

MICA\*008 and MICA\*009 were assigned in complete concordance. Little and Stastny, the two laboratories using sequencing-based typing, reported identical numbers of GCT-repeats in exon 5. MICA\*008 belongs to the MICA-A5.1 group which contains five triplet repeats plus one additional nucleotide

We encourage the participating laboratories to resolve discrepancies so that the information can be shared to improve the reliability and resolution of MICA typing systems.

We thank all participating laboratories in the UCLA International MICA Exchange Program.

insertion, GGCT/AGCC. This causes a frame shift mutation, which results in premature termination by the stop codon (TAA) in the transmembrane domain.

### **MICA#019 (Hispanic)**

The consensus typing of this sample is MICA\*001 and MICA\*011. One laboratory reported MICA\*002/\*20/\*23/\*052/\*055 and MICA\*007/\*026. MICA\*011 contains a valine at position 151 and an alanine at position 271 that are unique, compared with other MICA alleles.

### **MICA#020 (Asian)**

MICA\*008 and MICA\*045 were assigned by 100% of the laboratories. Both sequencing laboratories reported identical numbers of GCT-repeats in exon 5. MICA\*045 belongs to the MICA4 group.

**NEXT MAILING DATE: FEBRUARY 4, 2009**

*Marie Lau, Arlene Locke, Qiuheng Zhang, Raja Rajalingam, J.Michael Cecka, and Elaine F. Reed*

**Table 1: MICA typing results reported by participating laboratories.**

<b>MICA#017 (Hispanic)</b>	<b>CTR</b>	<b>Investigator</b>	<b>MICA* allele-1</b>	<b>MICA* allele-2</b>	<b>Others</b>	<b>Method</b>
	3625	Darke,Christophe	*00201/ *020/ *052	*004		SSP
	8054	Jackson,Annette	*002	*004	*020	rSSO
	278	Lee,Jar-How	*002/ *020	*004		rSSO
	759	Lefor, W.M.	*002/ *020	*004		rSSO
	8055	Little,Ann-Margar	*00901 (A6)	*004 (A6)	*049	SBT ex2-5
	16	Pidwell, Diane J.	*002/ *020	*004		rSSO
	8057	Ray, Bryan	*002/ *020/ *023/ *052/ *055	*004		rSSO
	3753	Reed,Elaine	*002/ *020/ *055	*004		rSSO
	791	Stastny,Peter	*00201 (A9)	*004 (A6)		SBT
	8053	Tyan,Dolly	*002/ *020/ *055	*004		rSSO
<b>MICA#018 (Asian)</b>	3625	Darke,Christophe	*00801	*00901		SSP
	8054	Jackson,Annette	*008	*009	*049	rSSO
	278	Lee,Jar-How	*008	*009/ *049		rSSO
	759	Lefor, W.M.	*008	*009/ *049		rSSO
	8055	Little,Ann-Margar	*008 (A5.1)	*00901 (A6)	*049	SBT ex2-5
	16	Pidwell, Diane J.	*008	*009/ *049		rSSO
	8057	Ray, Bryan	*008/ *027	*009/ *049		rSSO
	3753	Reed,Elaine	*008	*009/ *049		rSSO
	791	Stastny,Peter	*00801 (A5.1)	*00901 (A6)	*049 (A6)	SBT
	8053	Tyan,Dolly	*008	*009/ *049		rSSO
<b>MICA#019 (Hispanic)</b>	3625	Darke,Christophe	*001	*011/ *030/ *047		SSP
	8054	Jackson,Annette	*001	*011		rSSO
	278	Lee,Jar-How	*001	*011		rSSO
	759	Lefor, W.M.	*001	*011		rSSO
	8055	Little,Ann-Margar	*001	*011		SBT ex2-5
	16	Pidwell, Diane J.	*001	*011		rSSO
	8057	Ray, Bryan	*002/ *020/*023/ *052/ *055	*007/ *026	*001	rSSO
	3753	Reed,Elaine	*001	*011		rSSO
	791	Stastny,Peter	*001 (A4)	*011 (A6)		SBT
	8053	Tyan,Dolly	*001	*011		rSSO
<b>MICA#020 (Asian)</b>	3625	Darke,Christophe	*00801	*045		SSP
	8054	Jackson,Annette	*008	*045		rSSO
	278	Lee,Jar-How	*008	*045		rSSO
	759	Lefor, W.M.	*008	*045		rSSO
	8055	Little,Ann-Margar	*008 (A5.1)	*045 (A4)		SBT ex2-5
	16	Pidwell, Diane J.	*008	*045		rSSO
	8057	Ray, Bryan	*008/ *027	*045	*007/ *026	rSSO
	3753	Reed,Elaine	*008	*045		rSSO
	791	Stastny,Peter	*008 (A5.1)	*045 (A4)		SBT
	8053	Tyan,Dolly	*008	*045		rSSO

The number of GCT-repeats (A4, A5, A6, A7, A9, A10) or five GCT-repeats with an additional G (A5.1) in exon 5 (trans-membrane region) are indicated in parenthesis (PNAS 1997, 94:1298-1303).

rSSO - Luminex-based reverse sequence-specific oligonucleotide hybridization method

SBT - sequencing-based testing

SSP- sequence-specific priming