

REPORT OF THE 59th UCLA INTERNATIONAL KIR EXCHANGE

OCTOBER 28, 2024

KIR 255-260

For the 59th KIR Exchange, 6 DNA samples (KDNa#255 - 260) were shipped to 59 laboratories worldwide. KIR typing results were received from 57 of the laboratories. The results for the 59th KIR Exchange are summarized in Table 1 and individual laboratory results reported for each DNA sample are provided in Tables 2 - 7. Subtyping results for KIR2DS4 and 3DP1 are denoted as FULL or DEL. Discrepant results from consensus are

italicized in tables 1 - 7. Discrepancies at the allele level are not italicized.

We would like to acknowledge and thank centers 8047 and 8132 for providing allele level typing results for individual KIR genes and encourage other labs to do so as well. We would also like to express our appreciation to Arnold, Azzaro, and Renac for sharing their predicated haplotypes for the samples examined in this study.

KDNa#255 (Black)

2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL

Only a single discrepancy was observed for **KDNa#255**, in which 1 lab reported 2DL3 as positive instead of negative.

Two new alleles were identified in this sample. Center 8047 noted a new 2DL4 allele may be present, while center 8132 detected a possible new 3DP1 allele, 3DP1*002new.

Predicted haplotypes:

Arnold - BA1 and Bdel

Azzaro - Cen-B2/Cen-B2+ Tel-A/Tel-B1

Renac - AB

KDNa #256 (Caucasian)

2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL

No discrepancies were observed for **KDNa#256**.

Predicted haplotypes:

Arnold - A and AB

Azzaro - Cen-A/Cen-A + Tel-A/Tel-B1

Renac - AB

KDNA #257 (Black)

2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	FULL, DEL	POS	POS	DEL

A couple of discrepancies were observed for **KDNA#257** in which 2 labs reported 2DS1 as positive instead of negative.

A possible new 2DL3 allele was detected in this sample. Center 8132 described the 2DL3*014 variant as "most akin to a fusion of *010 (3") and *014 (5)". We thank center 8132 for sharing its observations.

Predicted haplotypes:

Arnold - A and BA2X

Azzaro - Cen-A/Cen-A + Tel-A/Tel-B1

Renac - AB

KDNA #258 (Black)

2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL

There were no discrepancies observed for **KDNA#258**.

The presence of 2 possible new alleles were detected in this samples. The first was a new 2DS4 allele. Centers 8047 and 8132 each reported the new allele, with center 8047 noting it was a variant of 2DS4*00104. The second, a possible new 2DP1*010 allele, was reported by center 8132.

Predicted haplotypes:

Azzaro - Cen-A/Cen-B1 + Tel-A/Tel-A

Renac - AB

KDNA #259 (Black)

2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	
POS	POS	POS	POS	A	POS	NEG	FULL	POS	POS	FULL, DEL						

Only a single discrepancy was observed for **KDNA#259** in which 1 lab reported 2DP1 as negative instead of positive.

The presence of a possible new 2DS1 allele was noted by center 8047.

Predicted haplotypes:

Azzaro - Cen-A/Cen-B2 + Tel-A/Tel-B1.

Renac - AB

KDNA #260 (Caucasian)

2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
POS	POS	POS	POS	A,B	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL

For **KDNA#260**, several discrepancies were observed. KIR2DL3 was reported as negative by 1 lab, and another lab report 2DS3 as negative instead of as positive. A third lab assigned 2DS4*FULL, while the remainder of labs indicated 2DS4 was absent.

Predicted haplotypes:

Renac - AB



NEXT MAILING DATE: February 26, 2025

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Table 1. Summary of the 59th KIR Exchange (KDNA #255-260)

KIR Ex.	DNA	# Labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
#59	255	57	NEG[57]	POS[55] *00301+ 00301 [1] *0030101, *00301 [1]	NEG[56] POS[1]	POS[54] NEW+ 01101 00501+ 00801 [1] *0050101, *00801 [1]	POS[45] A[8] A*0010103 [1]	POS[55] *0010109, *00701[1] 001/100/ 116+007 006+010[1]	POS[55] *0030103, 001402[1] 00301+ 01402/ 092[1]	POS[55] *0130101[1] 01301/ 107[1]	POS[55] NEW/ *00201[1] *0020101[1]	POS[56] *0010103, *00101[1]	POS[39] DEL[16] *0030101[2]	POS[55] *0020111[1] *00201 [1]	NEG[56] NT[1]	POS[45] FULL[9] *002NEW, *009010[1] 001/00302/ 004/00901+ 01001/011 [1]		
	256	57	NEG[57]	POS[55] *0020104, *00302 [1] *001/002+ 003/034/ 071/074 [1]	NEG[57]	POS[54] *0050101, *00802[1] 00501+ 00802[1]	POS[45] A[9] A,B[2] A*0010103 [1]	POS[55] *0050101, *00701[1] 005+007 011+043[1]	POS[55] *00902, *0010103[1]	POS[55] *0130101[1] *00101+ 00902[1]	POS[55] *01301/ 107[1]	POS[39] DEL[16] *0060101[1] *00201+ 00301[1]	POS[55] *0020126[1]	POS[46] *0020119, *00301[1] *00201+ 00301[1] NT[1]	POS[45] *0020119, *00301[1] *00201+ 00301[1] NT[1]			
	257	57	NEG[56] NT[1]	POS[55] *0030206, *00401[1]	NEG[56] NT[1]	POS[54] NORM[1] *022, *0060201[1]	POS[44] B[11] A[1] B*0080102[1]	POS[55] *0010303, *00801[1] *03101[1] *001/100/ 116+008 038+108[1]	POS[55] *02502, *0090101[1] *00901/ 081+ 02502 01502+ 04101[1]	NEG[54] POS[2] NT[1]	NEG[57]	NEG[57]	POS[43] FULL, DEL[13] *00104, *0040102[1]	POS[56] *0070101[1]	POS[45] DEL[9] *0030202, *00304[1] *001/00302/ 004/00901+ 00304[1] 00304[1] NT[1]			
	258	57	NEG[57]	POS[55] *00601[2]	NEG[57]	POS[54] *00501/ 00503/ 036[1]	NEG[57]	POS[55] *0310101, *03101[1] *001/100/ 116+001/ 100/116[1]	POS[55] *0010109, *00103[1] 001/100/ 116+001/ 100/116[1]	NEG[57]	NEG[57]	POS[40] FULL[15] *001040NEW[1]	POS[54] *010NEW[1] *010[1] NT[1]	POS[45] DEL[9] *0030209, *00302[1] *001/00302/ 004/00901[1]				
	259	57	NEG[57]	POS[55] *0030282[1] *00301/ 00302/ 034/071/ 074[1]	POS[55] *0030101[1]	POS[56] *0010101[1]	POS[54] *0010306, *00501[1] NORM[1] *00103+ 00501[1]	POS[45] A[6] A*029[2]	POS[55] *0150202[1] *01502/ 01702 [1]	POS[55] *029, *0020105[1] *00301+ 01001 00901/ 081+ 02801[1]	POS[55] *0130111[1] *0020101[1] *01301/ 107[1]	POS[55] *0010110[1] *00101/ 002/ 00601/ 022[1]	POS[40] FULL[15] *0010109[1] *00101/ 01102/017[1]	POS[53] *0020109[1] *00201[1] NEG[1] NT[1]	POS[46] FULL,DEL[9] *0030202, *00901[1] NT[1]			

Table 1. Summary of the 59th KIR Exchange (KDNA #255-260)

KIR Ex.	DNA	# Labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
#59	260	57	POS[54] NT[3]	POS[54] NT[3]	POS[53] <i>NEG[1]</i> NT[3]	POS[53] NORM[1] NT[3]	POS[47] A,B[5] A*00102, B*00201[1] A[1] NT[3]	NEG[54] NT[3]	POS[54] NT[3]	POS[54] NT[3]	POS[54] NT[3]	POS[54] NT[3]	POS[54] NT[3]	POS[52] <i>NEG[1]</i> NT[4]	NEG[53] <i>FULL[1]</i> NT[3]	POS[54] NT[3]	POS[53] NT[4]	POS[45] DEL[8] *0030101, *00302[1] NT[3]

[] - number of labs reporting allele assignment/POS/NEG/NT

POS - Presence of gene

NEG - Absence of gene

NT - Not typed; NR - Not reported/No result

italics - assignment different from consensus

Subtypes of 2DS4 and 3DP1 are designated as FULL and/or DEL

Methods

NGS - Next-generation sequencing

RT-PCR - Real-time PCR

SSO - Sequence-specific oligonucleotide probe based typing

SSP - Sequence-specific primer-based typing

SBT - Sequencing-based typing

Table 2. KDNA #255 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method	
	NEG[57]	POS[57]	NEG[56]	POS[57]	POS[48]+A[9]	POS[57]	POS[57]	POS[57]	POS[57]	POS[57]	POS[57]	NEG[57]	POS[39]+DEL[18]	POS[57]	NEG[56]	POS[45]+FULL[11]		
124	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NT	NT	SSP	
187	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
713	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR	
733	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP NGS	
762	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	SSP	
792	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
1108	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	POS	SSO	
1426	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	POS	SSP SSO	
1466	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR	
1694	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
3224	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
3410	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
3519	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
3753	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
3798	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
3966	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR	
4021	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
4251	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
4337	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
4345	NEG	POS	NEG	POS	A,B	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
5000	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
5133	NEG	POS	NEG	POS	A,B?	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	RT-PCR	
5142	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	SSP	
5282	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP	
5462	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	SSP	
5488	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
8030	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SBT	
																*001/ *00302/ *004/ *00901+ *01001/ *011		
8047	NEG	*00301+ *00301	NEG	*00801	POS	*00101/ *095	*001/*100/ *116+*007 *006+*010	*00301+ *01402/ *092	*01301/ *107	NEW/ *00201	POS	NEG	*0030101	*00201	NEG	NGS		
8050	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	SSP	
																	SSO	
8053	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	RT-PCR	
8060	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
8069	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	POS	SSO	
8071	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS		
8073	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	RT-PCR	
8074	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	POS	SSO	
8079	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
8080	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR	

Table 2. KDNA #255 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
8083	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO
8084	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR
8085	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	NGS
8086	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP
8090	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP SSO
8092	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR
													ALL EX.4				
8098	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	DEL EX.5	POS	NEG	POS	
8104	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	SSP
8105	NEG	POS	NEG	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	NGS
8110	NEG	POS	NEG	POS	A,B?	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	FULL	RT-PCR
8118	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR
8122	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR
8124	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSP SSO
8127	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR
			NORM /														
8129	NEG	POS	NEG	DEL	POS	POS	POS	POS	POS	POS	POS	NEG	DEL	POS	NEG	POS	SSP
8130	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	
8132	NEG	*0030101, *00301	NEG	*0050101, *00801	A*0010103	*0010116	*0010109, *00701	*0030103, *01402	*0130101	*0020101	*0010103, *00101	NEG	*0030101	*0020111	NEG	*002NEW, *009010	NGS
8134	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	ALL EX.4				
8136	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO
8137	NEG	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	RT-PCR

Table 3. KDNA #256 (Caucasian)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[57]	NEG[57]	POS[57]	POS[57]	POS[47]+ A[10]	POS[57]	POS[57]	POS[57]	POS[57]	POS[57]	NEG[57]	NEG[57]	POS[39]+ DEL[18]	POS[57]	POS[56]	POS[46]+ DEL[10]	
124	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	NT	NT	SSP
187	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
713	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
733	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP NGS
762	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	SSP
792	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
1108	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	POS	SSO
1426	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	POS	SSP SSO
1466	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
1694	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
3224	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
3410	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
3519	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
3753	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
3798	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
3966	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
4021	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
4251	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
4337	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
4345	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
5000	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
5133	POS	NEG	POS	POS	A,B?	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	RT-PCR
5142	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	SSP
5282	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
5462	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	SSP
5488	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
8030	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SBT
*001/*002+ *003/*034/ *071/*074		NEG	*00101+ *00201	*00501+ *00802	POS	*00401	*005+*007 *011+*043	*00101+ *00902	*01301/ *107	*006	NEG	NEG	*0060101/ *0060102	*00201	*00201+ *00301	POS	NGS
8047	*071/*074																
8050	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	SSP
8053	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	RT-PCR
8060	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
8069	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	POS	SSO
8071	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
8073	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	RT-PCR
8074	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	POS	SSO
8079	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
8080	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
8083	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
8084	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
8085	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	NGS

Table 3. KDNA #256 (Caucasian)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
8086	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
8090	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP SSO
8092	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
8098	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	ALL EX.4	DEL EX.5	POS	POS	POS
8104	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	SSP
8105	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	NGS
8110	POS	NEG	POS	POS	A,B?	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	RT-PCR
8118	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
8122	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
8124	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP SSO
8127	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
8129	POS	NEG	POS	DEL	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	POS	SSP
8130	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	
8132	*0020104, *00302	NEG	*0010101, *00201	*0050101, *00802	A*0010103	*0040101	*0050101, *00701	*00902, *0010103	*0130101	*006	NEG	NEG	*0060101	*0020126	*0020119, *00301	*0030211, *00601	NGS
8134	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	ALL EX.4	DEL EX.5	POS	POS	POS
8136	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSO
8137	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR

Table 4. KDNA #257 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	NEG[56]	POS[57]	POS[57]	POS[45]+ B[12]	POS[57]	POS[57]	POS[55]	NEG[57]	NEG[56]	NEG[57]	NEG[57]	POS[43]+ FULL, DEL[14]	POS[57]	POS[56]	POS[45]+ DEL[11]	
124	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	NT	NT	SSP
187	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
713	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
733	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP NGS
762	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	SSP
792	POS	NEG	POS	POS	B	POS	POS	POS	NEG	POS	NEG	NEG	POS	POS	POS	POS	SSP
1108	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	POS	SSO
1426	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	POS	SSP SSO
1466	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
1694	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
3224	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
3410	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
3519	POS	NEG	POS	POS	B	POS	POS	POS	NEG	POS	NEG	NEG	POS	POS	POS	POS	SSP
3753	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
3798	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
3966	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
4021	NT	NT	POS	POS	B	POS	POS	POS	NEG	NT	NEG	NEG	POS	POS	POS	POS	SSP
4251	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
4337	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
4345	POS	NEG	POS	POS	A	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
5000	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
5133	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	RT-PCR
5142	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	SSP
5282	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
5462	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	SSP
5488	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
8030	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SBT
									*00901/ *081+								*001/ *00302/
									*00701/ *102+	*001/*100/ *116+*008	*02502						*004/
8047	POS	NEG	POS	POS	*00601/ *00602+ *022	POS	*03101	*038+*108	*01502+ *04101	NEG	NEG	NEG	POS	POS	*00301+ *010	*00901+ *00304	NGS
8050	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	SSP
																	SSO
8053	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	RT-PCR
8060	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
8069	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	POS	SSO
8071	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	
8073	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	RT-PCR
8074	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	POS	SSO
8079	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
8080	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR

Table 4. KDNA #257 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
8083	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
8084	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
8085	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	NGS
8086	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
8090	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP SSO
8092	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
8098	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	
8104	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	SSP
8105	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	NGS
8110	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	NEG	FULL,DEL	POS	POS	DEL	RT-PCR
8118	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
8122	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
8124	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP SSO
8127	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR
8129	POS	NEG	POS	NORM	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSP
8130	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	
8132	*0030206, *00401	NEG	*014VAR, *001010	*022, *0060201	B*0080102	*0070101, *03101	*0010303, *00801	*02502, *0090101	NEG	NEG	NEG	NEG	*00104, *0040102	*0070101	*010, *0030106	*0030202, *00304	NGS
8134	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	
8136	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	SSO
8137	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	NEG	POS	POS	POS	POS	RT-PCR

Table 5. KDNA #258 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[57]	NEG[57]	POS[57]	POS[57]	NEG[57]	POS[57]	POS[57]	POS[57]	NEG[57]	NEG[57]	POS[57]	NEG[57]	POS[41]+ FULL[16]	NEG[57]	POS[56]	POS[45]+ DEL[11]	
124	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NT	NT	SSP
187	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
713	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
733	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP NGS
762	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	SSP
792	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
1108	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSO
1426	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP SSO
1466	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
1694	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
3224	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
3410	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
3519	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
3753	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
3798	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
3966	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
4021	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
4251	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
4337	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
4345	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
5000	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
5133	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	RT-PCR
5142	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	SSP
5282	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
5462	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	SSP
5488	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8030	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SBT
8047	*00601	NEG															*001/ *00302/ *004/ *00901
8050	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	SSP
																	SSO
8053	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	RT-PCR
8060	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8069	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSO
8071	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	
8073	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	RT-PCR
8074	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSO
8079	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8080	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
8083	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO

Table 5. KDNA #258 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
8084	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
8085	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	NGS
8086	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8090	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
8092	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
8098	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	EX.5	NEG	POS	POS	
8104	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	SSP
8105	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	NGS
8110	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	DEL	RT-PCR
8118	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
8122	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
8124	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
8127	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR
8129	POS	NEG	POS	NORM	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8130	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	
8132	*00601	NEG	POS	*022, *022	NEG	*0310101, *03101	*0010109, *00103	*022, *035	NEG	NEG	*00102	NEG	*00104 NEW	NEG	*010NEW	*0030209, *00302	NGS
8134	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	EX.5	NEG	POS	POS	
8136	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8137	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	RT-PCR

Table 6. KDNA #259 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method	
	POS[57]	POS[57]	POS[57]	POS[57]	POS[48]+ A[8]	POS[57]	POS[57]	POS[57]	POS[57]	POS[57]	POS[57]	NEG[57]	POS[40]+ FULL[17]	POS[57]	POS[55]	POS[46]+ FULL, DEL[10]		
124	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NT	NT	SSP	
187	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
713	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
733	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP NGS	
762	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	SSP	
792	POS	POS	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
1108	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSO	
1426	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSP SSO	
1466	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
1694	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
3224	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
3410	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
3519	POS	POS	POS	POS	Inconclusive	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
3753	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
3798	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
3966	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
4021	POS	POS	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
4251	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
4337	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
4345	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
5000	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
5133	POS	POS	POS	POS	A,B?	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	RT-PCR	
5142	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	SSP	
5282	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
5462	POS	POS	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	SSP	
5488	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
8030	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SBT	
	*00301/ *00302/ *034/*071/ *074			*00103+ *00501	A*029	*01502/ *01702	*00201/ *00202/ *101/ *102+*029	*00301+ *01001 *00901/ *081+	*01301/ *107	NEW/ *00201	*00101/ *002/ *00601/ *022	NEG	*00101/ *01102/ *017	*00201	*00201	POS	NGS	
8047	*00301	POS	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	SSP	
8050	POS	POS	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	SSP	
																	SSO	
8053	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	RT-PCR	
8060	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
8069	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSO	
8071	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS		
8073	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	RT-PCR	
8074	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSO	
8079	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
8080	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	

Table 6. KDNA #259 (Black)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method	
8083	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	SSO	
8084	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
8085	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NGS	
8086	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
8090	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP SSO	
8092	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
													ALL EX.4 FULL LENGTH					
8098	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	EX.5	POS	POS	POS		
8104	POS	POS	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	SSP	
8105	POS	POS	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NGS	
8110	POS	POS	POS	POS	A,B?	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	FULL,DEL	RT-PCR	
8118	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
8122	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
8124	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP SSO	
8127	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	
8129	POS	POS	POS	NORM	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP	
8130	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS		
8132	*0030282	*0030101	*0010101	*00501	A*029	*0150202	*0020105	*029,	*01001,	*0030105	*0130111	*0020101	*0010110	NEG	*0010109	*00201	*0020109	*0030202, *00901 NGS
													ALL EX.4 FULL LENGTH					
8134	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	EX.5	POS	POS	POS		
8136	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO	
8137	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR	

Table 7. KDNA #260 (Caucasian)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[54]	POS[54]	POS[53]	POS[54]	POS[48]+ A,B[6]	NEG[54]	POS[54]	POS[54]	POS[54]	POS[54]	POS[54]	POS[52]	NEG[53]	POS[54]	POS[53]	POS[45]+ DEL[9]	
124	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	NT	NT	SSP
187	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
713	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
733	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP NGS
762	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	SSP
792	POS	POS	POS	POS	A	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
1108	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	FULL	POS	POS	POS	SSO
1426	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP SSO
1466	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
1694	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
3224	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
3410	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
3519	POS	POS	POS	POS	Inconclusive	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
3753	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
3798	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
3966	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
4021	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSP
4251	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
4337	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
4345	POS	POS	POS	POS	A,B	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
5000	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
5133	POS	POS	POS	POS	A,B?	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	RT-PCR
5142	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	SSP
5282	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
5462	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	SSP
5488	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
8030	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SBT
8047	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NGS
8050	POS	POS	POS	POS	A,B	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	SSP
																SSO	
8053	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	RT-PCR
8060	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
8069	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
8071	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	
8073	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	RT-PCR
8074	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
8079	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
8080	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
8083	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
8084	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	Ambiguous	NEG	POS	POS	RT-PCR
8085	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NGS
8086	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
8090	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP SSO

Table 7. KDNA #260 (Caucasian)

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
8092	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
8098	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	
8104	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	
8105	POS	POS	POS	POS	A,B	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NGS
8110	POS	POS	POS	POS	A,B?	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	RT-PCR
8118	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
8122	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
8124	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP SSO
8127	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
8129	POS	POS	POS	NORM	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSP
8130	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	
					A*00102, B*00201											*0030101,	
8132	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	*00302	NGS
8134	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	
8136	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSO
8137	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR