

# REPORT OF THE 61<sup>st</sup> UCLA INTERNATIONAL KIR EXCHANGE

## DECEMBER 1, 2025

**KIR 267-272**

For the 61<sup>st</sup> KIR Exchange, 6 DNA samples (KDNA#267 - 272) were shipped to 57 laboratories worldwide. KIR typing results were received from 56 of the laboratories. The results for the 61<sup>st</sup> 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 express our appreciation to centers 8047 and 8132 for consistently providing allele level typing results for individual KIR genes and encourage other labs to do so as well. We also wish to acknowledge Dr. Azzaro for sharing her predicated haplotypes for the samples examined in this study.

### KDNA #267 (Asian)

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

For sample **KDNA #267**, good agreement ( $\geq 90\%$ ) was achieved across all KIR genes. Only 2 discrepancies were observed, with 1 lab reporting 2DL3 as negative and 1 lab reporting 2DS5 as positive. Center 8132 noted a new 2DL4\*001 allele was present in this sample.

Predicted haplotypes:

Azzaro - Cen-A/Cen-A+ Tel-A/Tel-B

### KDNA #268 (Black)

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

For sample **KDNA #268**, good agreement ( $\geq 90\%$ ) was achieved across all KIR genes. The only discrepancies observed were in which 2 labs reported 2DL3 as positive instead of as negative.

Predicted haplotypes:

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

Several new alleles were detected in this sample by centers 8047 and 8132. Center 8047 identified new alleles for 2DL2, 3DL3, 2DS2, and 2DS4. Center 8132 indicated a new 2DP1\*0090102 allele was present, and each lab detected a new 2DL1 gene.

**KDNA #269 (Hispanic)**

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

For sample **KDNA#269**, 48 labs (86%) reported 2DS3 as negative, 7 labs (12%) reported it as positive, and 1 lab (2%) noted their results as ambiguous. Among the 7 labs reporting 2DS3-POS, 6 labs indicated using the LinkSeq real-time PCR KIR typing kit. As consensus for 2DS3 was < 90%, it was not included in the grading analysis for this sample.

Center 8102 detected a new 2DP1\*00106 allele. Azzaro noted this sample has an unusual haplotype where 2DS2 is present and 2DL2 is absent.

Predicted haplotypes:  
Azzaro - Cen-A/Cen-B1+Tel-B1/Tel-B1

**KDNA #270 (Asian)**

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

For sample **KDNA#270**, good agreement was achieved across all genes. Only a single discrepancy was observed in which 1 lab reported 2DS5 as positive instead of as negative. Two labs, ctr 8047 and ctr 8132, each noted a new 3DP1 allele was present. In addition, ctr 8047 and ctr 8105 detected the presence of a 2DL3/2DP1 hybrid gene in this sample.

Predicted haplotypes:  
Azzaro - Cen-B1/Cen-B2+Tel-A/Tel-A

**KDNA #271 (Hispanic)**

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

For sample **KDNA#271**, no discrepancies were observed across all KIR genes. Centers 8047 and 8132 each commented on the presence of a new 3DL1\*01502 gene.

Predicted haplotypes:  
Azzaro - Cen-B2/Cen-B2+ Tel-A/Tel-A


**KDNA #272 (Hispanic)**

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	POS	NG	FULL	POS	POS	DEL

For sample **KDNA#272**, 49 labs (87%) reported 2DS3 as negative, 6 labs (11%) reported it as positive, and 1 lab (2%) reported ambiguous results. Five of the 6 labs reporting 2DS3 as positive tested the sample using the LinkSeq RT-PCR KIR typing kit. KIR2DS3 was not included in the grading analysis for this sample as consensus for it was < 90%.


present in the absence of 2DL2. Center 8047 indicated a new 2DL4 and a new 2DP1 allele were present.

Predicted haplotypes:  
Azzaro - Cen-A/Cen-B1+ Tel-A/Tel-B1



**NEXT MAILING DATE: February 25, 2026**

*Arlene Locke, David Gjertson, Qiheng Zhang, and Elaine F. Reed*



**Table 1. Summary of the 61st KIR Exchange (KDNA #267-272)**

KIR Ex.	DNA	# Labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
#61	267	56	POS[55] NT[1]	NEG[55], NT[1]	POS[53] *00101+ *00101[1] NEG[1] NT[1]	POS[54] NORM/ DEL[1] *00102, *001New[1]	NEG[54] A[1] NT[1]	POS[54] *00501/ *120+ *01502/ *01702[1] NT[1]	POS[54] *01001/ *01004+ *01001/ *01004[1] NT[1]	POS[54] *00802+ *01002[1] NT[1]	POS[54] *01301/ *107[1] NT[1]	NEG[55] NT[1]	NEG[55] NT[1]	NEG[55] NT[1]	POS[36] FULL,DEL[18] *00101/ *017+*010[1] NT[1]	NEG[54] POS[1] NT[1]	POS[53] *00201+ *00201[1] NT[2]	POS[42] FULL,DEL[10] FULL[1] DEL[1] *00302, *00302[1] NT[1]
	268	56	POS[54] New[1] *01202 New[1]	POS[54] New+New  New+ *00301[1] *00301[1]	NEG[54] POS[2]	POS[53] *00103[1] NORM[1] *00103[1]	POS[45] B[8] B*003/ B*00701+ B*011[1]	POS[54] *03101/ *018[1] *0310101[1]	POS[54] *001/*100/ *116+006[1] *00601, *0010303[1]	POS[54] New+022  New+ 034[1] *022,*034[1]	NEG[56]	POS[54] *004[1] *004[1]	POS[54] New+New New+ *00105/ *004[1] *00102[1]	NEG[56]	POS[36] FULL[18] New *00101/ *017[1] *00104[1]	POS[55] *003, *00502[1]	POS[54] *0090102 New[1] NT[1]	POS[41] DEL[12] *02801[1] *0280102[1] NT[1]
	269	56	POS[56]	NEG[56]	POS[53] *00101[1] NEG[2]	POS[53] *00501+ *00501[1] NORM[1] *0050101, *005[1]	POS[47] A[6] A, B?[2] A*00103, A*01010[1]	NEG[54] POS[1] NT[1]	POS[54] *007+ *007[1] *0020101, *00701[1]	POS[54] *00301+ *00902[1] *00902, *0030103[1]	POS[54] *01301/ *107+ *01301/ *107[1], NT[1]	POS[54] *00201/ *00502+ *00201/ *00502[1] *0020103, *00201[1]	POS[54] *005[1] NEG[1]	NEG[48] POS[7] Ambiguous[1]	NEG[55] NT[1]	POS[54] *00201+ *00201[1] *0020132, *002[1]	POS[53] New+ *00201[1] *00106New, *0020[1] NT[1]	POS[41] DEL[12] *001/*00302/ *004/*00901+ *00301[1] *0030105, *00302[1] NT[1]
	270	56	POS[54] *00301/ *00302/ *034/071/ *074[1] *0030282[1]	POS[55] *0030101[1]	NEG[52] 2DL3/2DP1 Hybrid Gene[2] POS[1] Partial Seq[1]	POS[53] *00102+ *00103[1] NORM[1] *0010201, *00103[1]	NEG[55] Partial Seq[1]	POS[54] *00201+ *01502/ *01702[1] *0020103, *01502[1]	POS[54] *002/*101/ *102+*002/ *101/*102[1] *0020101, *00201[1]	POS[54] *003+*011  *009/081+ *020[1] *01101, *0030103[1]	NEG[56]	NEG[56]	POS[54] *00101/ *002*022  *00101/*022  *00601[1] *0010103[1]	NEG[56]	POS[37] FULL[18] *0010101, *00101[1]	NEG[55] POS[1] NT[1]	NEG[52] 2DL3/2DP1 Hybrid Gene[2] Partial Seq[1] NT[1]	POS[41] FULL,DEL[12] New+*001/ *003/*004/ *009 New+ *028[1] *00901,*02801 New[1] NT[1]

**Table 1. Summary of the 61st KIR Exchange (KDNA #267-272)**

KIR Ex.	DNA	# Labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
#61	271	56	NEG[56]	POS[54] *00301+ *00301[1] *0030101, *00301[1]	NEG[56]	POS[53] *00102+ *00102[1] NORM[1] *0010201[1]	NEG[56]	POS[54] New+ *01502/ *01702[1] *01502, *01502 New[1]	POS[54] *002/*101/ *102+*002/ *101/*102[1] *002[1]	POS[54] *00402+ *00402[1] *0040201[1]	NEG[56]	NEG[56]	POS[55] *0010104[1]	NEG[56]	POS[37] FULL[18] *0010104[1]	NEG[56]	NEG[55] NT[1]	POS[41] FULL[12] *007+*007[1] *007[1] NT[1]
	272	56	POS[55] *0030205, *00401[1]	NEG[56]	POS[53] *00101[1] *0010101[1] <i>NEG[1]</i>	POS[47] A[6] A, B?[2] A*0010103[1]	POS[55] *150204[1]	POS[54] New+ *00103  *00102+ *00501[1] NORM[1] *0010201, *00501[1]	POS[55] *0020105, *00902, *00701[1]	POS[54] *00301+ *00902[1] *00902, *0030103[1]	POS[54] *01301/ *107[1] *130118[1]	POS[54] *00201/ *00502[1] *0020103[1]	POS[54] *005[1] <i>NEG[1]</i>	NEG[49] POS[6] <i>Ambiguous[1]</i>	POS[36] FULL[18] *00101/*017[1] *0010102[1]	POS[54] *00201[1] *0020111[1]	POS[53] New+ *00201[1] *00106 *0020118[1] NT[1]	POS[41] DEL[12] *001/*00302/ *004/*00901+ *00301[1] *0030105, *00302[1] NT[1]

Indicates consensus < 90%

[ ] - 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 #267 (Asian)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[55]	NEG[55]	POS[55]	POS[56]	NEG[54]	POS[55]	POS[55]	POS[55]	POS[55]	NEG[55]	NEG[55]	NEG[55]	POS[37]+ FULL, DEL[18]	NEG[54]	POS[54]	POS[45] FULL, DEL[10]	
124	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	NT	NT	SSP
187	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
713	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
733	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP NGS
762	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	SSP
1108	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	POS	SSO
1426	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	SSP SSO RT-PCR
1466	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
1694	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
3224	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
3519	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
3753	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
3798	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
3966	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
4251	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
4337	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
4345	POS	NEG	POS	POS	A	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	POS	SSP
5000	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
5133	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	RT-PCR
5142	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	SSP
5219	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
5282	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
5462	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	SSP
5488	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
8030	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
8047	POS	NEG	*00101+	POS	NEG	*00501/ *120+ *01502/ *01702	*01001/ *01004+	*00802+	*01301/ *107	NEG	NEG	NEG	*00101/ *017+*010	NEG	*00201+	POS	NGS
8050	POS	NEG	*00101	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	*00201	FULL,DEL	SSP
8053	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	SSO RT-PCR
8060	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
8069	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	POS	SSO
8071	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
8073	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	RT-PCR
8074	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	POS	SSO
8079	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO

**Table 2. KDNA #267 (Asian)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[55]	NEG[55]	POS[55]	POS[56]	NEG[54]	POS[55]	POS[55]	POS[55]	POS[55]	NEG[55]	NEG[55]	NEG[55]	POS[37]+ FULL, DEL[18]	NEG[54]	POS[54]	POS[45] FULL, DEL[10]	
8080	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP RT-PCR
8083	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSO
8084	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
8085	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	NGS
8086	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP
8090	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP SSO
8092	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
8098	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL, DEL,ALL	NEG	POS	POS	
8104	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	FULL,DEL	SSP SSO
8105	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	NGS
8110	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	FULL,DEL	
8118	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
8122	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR
8124	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	SSP SSO
8126	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	DEL	SSP
8127	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	
8129	POS	NEG	POS	NORM / DELETED	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	POS	SSP
8130	POS	NEG	NEG	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	POS	
8132	NT	NT	NT	*00102, *001New	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	*00302, *00302	NGS
8134	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	FULL,DEL	NEG	POS	POS	SSO
8137	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	RT-PCR

**Table 3. KDNA #268 (Black)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	POS[56]	NEG[54]	POS[56]	POS[46]+ B[10]	POS[56]	POS[56]	POS[56]	NEG[56]	POS[56]	POS[56]	NEG[56]	POS[38]+ FULL[18]	POS[56]	POS[55]	POS[43]+ DEL[12]	
124	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	NT	NT	SSP
187	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
713	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
733	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP NGS
762	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSP
1108	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	POS	SSO
1426	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSP SSO RT-PCR
1466	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
1694	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
3224	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
3519	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
3753	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
3798	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
3966	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
4251	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
4337	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
4345	POS	POS	NEG	POS	A	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
5000	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
5133	POS	POS	NEG	POS	B	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	RT-PCR
5142	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSP
5219	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
5282	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
5462	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSP
5488	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
8030	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
8047	New	New+New  New+ *00301	NEG	*00103	B*003/ B*00701+ B*011	*03101/ *018	*001/ *100/ *116+ *006	New+ 022  New+ 034	NEG	*004	New+New  New+ *00105/ *004	NEG	New  *00101/ *017	POS	POS	*02801	NGS
8050	POS	POS	NEG	POS	B	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSP
8053	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSO RT-PCR
8060	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
8069	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	POS	SSO
8071	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
8073	POS	POS	NEG	POS	B	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	RT-PCR
8074	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	POS	SSO
8079	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO

**Table 3. KDNA #268 (Black)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	POS[56]	NEG[54]	POS[56]	POS[46]+ B[10]	POS[56]	POS[56]	POS[56]	NEG[56]	POS[56]	POS[56]	NEG[56]	POS[38]+ FULL[18]	POS[56]	POS[55]	POS[43]+ DEL[12]	
8080	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP RT-PCR
8083	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSO
8084	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8085	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NGS
8086	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP
8090	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP SSO
8092	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8098	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	ALL, FULL	POS	POS	POS	
8104	POS	POS	NEG	POS	B	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	DEL	SSP SSO
8105	POS	POS	POS	POS	B	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	NGS
8110	POS	POS	NEG	POS	B	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	
8118	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8122	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8124	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	SSP SSO
8126	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSP
8127	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	
8129	POS	POS	NEG	2DL4 NORM	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	POS	SSP
8130	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	POS	
8132	*01202 New	*00301	NEG	*00103	B*003, B*011	*0310101	*00601, *0010303	*022, *034	NEG	*004	*00102	NEG	*00104	*003, *00502	*0090102 New	*0280102	NGS
8134	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	POS	SSO
8137	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8141	POS	POS	NEG	POS	B	POS	POS	POS	NEG	POS	POS	NEG	FULL	POS	POS	DEL	SSP

**Table 4. KDNA #269 (Hispanic)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method		
	POS[56]	NEG[56]	POS[54]	POS[56]	POS[49]+ A[7]	NEG[54]	POS[56]	POS[56]	POS[55]	POS[56]	POS[55]	NEG[48] POS[7]	NEG[55]	POS[56]	POS[55]	POS[43]+ DEL[12]			
124	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	NT	NT	SSP		
187	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
713	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR		
733	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP NGS		
762	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP		
1108	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
1426	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP SSO RT-PCR		
1466	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR		
1694	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP		
3224	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
3519	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP		
3753	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
3798	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP		
3966	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	RT-PCR		
4251	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
4337	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP		
4345	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP		
5000	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
5133	POS	NEG	POS	POS	A, B?	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	RT-PCR		
5142	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP		
5219	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
5282	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP		
5462	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP		
5488	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
8030	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
8047	POS	NEG	*00101	*00501+	*00501+	POS	NEG	*007+	*00301+	*01301/ *107+	*00201/ *00502+	*00201/ *00502	*005	NEG	NEG	*00201+	New+ *00201	*001/ *00302/ *004/ *00901+ *00301	NGS
8050	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP		
8053	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSO RT-PCR		
8060	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
8069	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
8071	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
8073	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	RT-PCR		
8074	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		
8079	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO		

**Table 4. KDNA #269 (Hispanic)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	NEG[56]	POS[54]	POS[56]	POS[49]+ A[7]	NEG[54]	POS[56]	POS[56]	POS[55]	POS[56]	POS[55]	NEG[48] POS[7]	NEG[55]	POS[56]	POS[55]	POS[43]+ DEL[12]	
124	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	NT	NT	SSP
8080	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP RT-PCR
8083	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO
8084	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	Ambiguous	NEG	POS	POS	POS	RT-PCR
8085	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NGS
8086	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP
8090	POS	NEG	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP SSO
8092	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
8098	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	
8104	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP SSO
8105	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NGS
8110	POS	NEG	POS	POS	A, B?	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	DEL	
8118	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	RT-PCR
8122	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	RT-PCR
8124	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP SSO
8126	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP
8127	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	
8129	POS	NEG	POS	NORM	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSP
8130	POS	NEG	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	
8132	POS	NEG	POS	*0050101, *005	A*00103, A*01010	NT	*0020101, *00701	*00902, *0030103	NT	*0020103, *00201	NEG	NEG		*0020132, *002	*00106 New, *0020	*0030105, *00302	NGS
8134	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	SSO
8137	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	RT-PCR
8141	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	SSP

**Table 5.KDNA #270 (Asian)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	POS[56]	NEG[52]	POS[56]	NEG[55]	POS[56]	POS[56]	POS[56]	NEG[56]	NEG[56]	POS[56]	NEG[56]	POS[38]+ FULL[18]	NEG[55]	NEG[52]	POS[43]+ FULL, DEL[12]	
124	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NT	NT	SSP
187	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
713	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
733	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP NGS
762	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSP
1108	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
1426	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSP SSO RT-PCR
1466	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
1694	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
3224	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
3519	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
3753	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
3798	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
3966	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
4251	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
4337	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
4345	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	POS	NEG	POS	SSP
5000	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
5133	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	RT-PCR
5142	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSP
5219	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
5282	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
5462	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSP
5488	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8030	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8047	*00301/ *00302/ *034/ *071/ *074	POS	2DL3/ 2DP1 HYBRID GENE	*00102+ *00103	NEG	*00201+ *01502/ *01702	*002/ *101/ *102+ *002/ *101/ *102	*003+ *011 *009 /*081+	NEG	NEG	*00101/ *002/*022  *00101/ *022  *00601	NEG	POS	NEG	2DL3/ 2DP1 HYBRID GENE	New+ *001/ *003 /*004/ *009 New+ *028	NGS
8050	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSP
8053	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSO RT-PCR
8060	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8069	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
8071	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8073	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	RT-PCR

**Table 5.KDNA #270 (Asian)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	POS[56]	NEG[52]	POS[56]	NEG[55]	POS[56]	POS[56]	POS[56]	NEG[56]	NEG[56]	POS[56]	NEG[56]	POS[38]+ FULL[18]	NEG[55]	NEG[52]	POS[43]+ FULL, DEL[12]	
8074	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
8079	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8080	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO RT-PCR
8083	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8084	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8085	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	NGS
8086	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8090	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
8092	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8098	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	ALL,FULL	NEG	NEG	POS	
8104	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	FULL,DEL	SSP SSO
8105	POS	POS	2DL3/ 2DP1 HYBRID GENE	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	2DL3/ 2DP1 HYBRID GENE	POS	NGS
8110	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	
8118	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8122	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8124	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
8126	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSP
8127	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	
8129	POS	POS	NEG	2DL4 NORM	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSP
8130	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	
8132	*0030282	*0030101	Partial sequence found	*0010201, *00103	Partial sequence found	*0020103, *01502	*0020101, *00201	*01101, *0030103	NEG	NEG	*0010103	NEG	*0010101, *00101	NEG	Partial sequence found	*00901, *02801New	NGS
8134	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
8137	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8141	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL,DEL	SSP

**Table 6. KDNA #271 (Hispanic)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	NEG[56]	POS[56]	NEG[56]	POS[56]	NEG[56]	POS[56]	POS[56]	POS[56]	NEG[56]	NEG[56]	POS[56]	NEG[56]	POS[38]+ FULL[18]	NEG[56]	NEG[55]	POS[43]+ FULL[12]	
124	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NT	NT	SSP
187	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
713	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
733	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP NGS
762	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP
1108	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
1426	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP SSO RT-PCR
1466	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
1694	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
3224	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
3519	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
3753	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
3798	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
3966	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
4251	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
4337	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
4345	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
5000	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
5133	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	RT-PCR
5142	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP
5219	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
5282	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
5462	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP
5488	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8030	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8047	NEG	*00301+ *00301	NEG	*00102+ *00102	NEG	New+ *01502/ *01702	*002/101/ *102+ *002/ *101/*102	*00402+ *00402	NEG	NEG	POS	NEG	POS	NEG	NEG	*007+ *007	NGS
8050	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP
8053	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSO RT-PCR
8060	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8069	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
8071	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8073	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	RT-PCR
8074	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
8079	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO

**Table 6. KDNA #271 (Hispanic)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	NEG[56]	POS[56]	NEG[56]	POS[56]	NEG[56]	POS[56]	POS[56]	POS[56]	NEG[56]	NEG[56]	POS[56]	NEG[56]	POS[38]+ FULL[18]	NEG[56]	NEG[55]	POS[43]+ FULL[12]	
8080	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP RT-PCR
8083	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8084	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8085	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	NGS
8086	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8090	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
8092	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8098	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	ALL,FULL	NEG	NEG	POS	
8104	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	FULL	SSP SSO
8105	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	NGS
8110	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	
8118	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8122	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8124	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
8126	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP
8127	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	
8129	NEG	POS	NEG	NORM	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSP
8130	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	
8132	NEG	*0030101, *00301	NEG	*0010201	NEG	*01502, *01502 New	*002	*0040201	NEG	NEG	*0010104	NEG	*0010104	NEG	NEG	*007	NGS
8134	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	POS	SSO
8137	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	RT-PCR
8141	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP

**Table 7. KDNA #272 (Hispanic)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	NEG[56]	POS[55]	POS[56]	POS[49]+ A[7]	POS[56]	POS[56]	POS[56]	POS[56]	POS[56]	POS[55]	NEG[49] POS[6]	POS[38]+ FULL[18]	POS[56]	POS[55]	POS[43]+ DEL[12]	
124	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	NT	NT	SSP
187	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
713	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	RT-PCR
733	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP NGS
762	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSP
1108	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSO
1426	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSP SSO RT-PCR
1466	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	RT-PCR
1694	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP
3224	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
3519	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP
3753	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
3798	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP
3966	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
4251	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
4337	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP
4345	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP
5000	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
5133	POS	NEG	POS	POS	A, B?	POS	POS	POS	POS	POS	POS	POS	FULL	POS	POS	DEL	RT-PCR
5142	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSP
5219	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
5282	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP
5462	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSP
5488	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
8030	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
8047	POS	NEG	00101	New+ *00103  *00102+ *00501	POS	POS	POS	*00301+ *00902	*01301/ *107	*00201/ *00502	*005	NEG	*00101/ *017	*00201	New+ *00201	*001/ *00302/ *004/ *00901+ *00301	NGS
8050	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSP
8053	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSO RT-PCR
8060	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
8069	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSO
8071	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
8073	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	FULL	POS	POS	DEL	RT-PCR
8074	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSO
8079	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO

**Table 7. KDNA #272 (Hispanic)**

CTR	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	POS[56]	NEG[56]	POS[55]	POS[56]	POS[49]+ A[7]	POS[56]	POS[56]	POS[56]	POS[56]	POS[56]	POS[55]	NEG[49] POS[6]	POS[38]+ FULL[18]	POS[56]	POS[55]	POS[43]+ DEL[12]	
8080	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP RT-PCR
8083	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSO
8084	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	Ambiguous	POS	POS	POS	POS	RT-PCR
8085	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NGS
8086	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP
8090	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP SSO
8092	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8098	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	ALL,FULL	POS	POS	POS	
8104	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	DEL	SSP SSO
8105	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NGS
8110	POS	NEG	POS	POS	A, B?	POS	POS	POS	POS	POS	POS	POS	FULL	POS	POS	DEL	
8118	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8122	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	RT-PCR
8124	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	SSP SSO
8126	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSP
8127	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	
8129	POS	NEG	POS	NORM	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSP
8130	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	
8132	*0030205, *00401	NEG	*0010101	*0010201, *00501	A*0010103	*150204	*0020105, *00701	*00902, *0030103	*130118	*0020103	NEG	NEG	*0010102	*0020111	*00106, *0020118	*0030105, *00302	NGS
8134	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	POS	SSO
8137	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	RT-PCR
8141	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	POS	NEG	FULL	POS	POS	DEL	SSP