

# REPORT OF THE 35<sup>th</sup> UCLA International KIR Exchange

## OCTOBER 8, 2014

KIR

137-140

Dear Colleagues:

For the 35<sup>th</sup> KIR Exchange, 4 DNA samples (KDNA#137-140) were shipped to participating laboratories on August 6, 2014. A total of 75 laboratories submitted their KIR typing results. The majority of the laboratories used either commercial or in-house developed sequence-specific primer (SSP) based PCR and sequence-specific oligonucleotide probe (SSOP) typing systems.

The results for the 35<sup>th</sup> KIR Exchange are summarized in Table 1 and individual laboratory results reported for each DNA sample are provided in Tables 2-5. Subtyping results for KIR2DL3, 2DL5, 3DL1, 2DS4, and 3DP1

loci were reported by some laboratories. The subtypes for 2DS4 and 3DP1 are denoted as FULL or DEL. The positive/negative assignments for all 4 DNA samples were reported without any discrepancy for 5 of the 16 tested KIR loci (KIR2DL4, 3DL1, 3DL2, 3DL3, and 2DS5). Discrepant results from the consensus typing are italicized in tables 1-5 and described in the summation for each sample. Discrepancies at the allele level are not italicized.

We thank you for your continued participation in the UCLA KIR Exchange program.

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### KIR Exchange Sample: KDNA # 0137:

The consensus KIR type for this Black sample is KIR2DL1-2DL2-2DL3-2DL4-3DL1-3DL2-3DL3-2DS2-2DS4FULL-2DP1-3DP1FULL&DEL. One lab reported this sample as negative for 2DL2 and positive for 2DS1. One lab reported 2DS2 as negative and 3 labs reported KIR2DS3 as positive. For KIR2DL3, the majority (n=62) of labs reported it as positive, while another 12 (11 SSP, 1 SSO) reported it as negative. Two labs reporting 2DL3 as negative commented on observing a weak band for KIR2DL3 by SSP. KIR2DL3\*010 was assigned by 5 SSP labs. The genotype in this sample is common across all populations, occurring at a frequency of 6.9% in African Americans (1).

### KIR Exchange Sample: KDNA # 0138:

The consensus KIR type for this sample of Jamaican descent is KIR2DL1-2DL3-2DL4-2DL5B-3DL1-3DL2-3DL3-2DS3-2DS4FULL-2DP1-3DP1DEL. Three labs reported 2DL2 as positive, 2 labs reported 2DL5 as negative, and 1 lab reported 2DS4 and 3DP1 as negative. A number of additional discrepancies (n=5) was reported by 1 lab. Hartzman and Hurley noted that that an uncommon centromeric B haplotype (cB03) was present in this sample. Turner and Arnold also commented on the unusual haplotype present, noting that the sample is positive for 2DL5B and 2DS3, but negative for 2DS2 and 2DL2. The genotype in this sample is observed in Southeast Asians, with the highest frequency occurring among Samoan populations, 2.0% (2).

**KIR Exchange Sample: KDNA # 0139:**

The consensus KIR type for this Caucasian sample is KIR2DL2-2DL4-3DL1-3DL2-3DL3-2DS2-2DS4DEL-3DP1FULL. One lab reported KIR2DL1 as positive, 1 reported 2DL2 as negative, and 2 labs reported 2DL3 as positive. One lab reported 2DS2 and 2DS4 as negative and 2 labs reported 2DS3 as positive. The genotype in this sample is observed across various Caucasian populations (1.0%-3.0%), as well as among the Mollukurumba populations (4.0%) in southern India (3, 4) . It is absent in Northeast Asian and Mexican populations.

**References:**

1. Norman, P. J., C. V. Carrington, M. Byng, L. D. Maxwell, M. D. Curran, H. A. Stephens, D. Chandanayingyong, D. H. Verity, K. Hameed, D. D. Ramdath, and R. W. Vaughan. 2002. Natural killer cell immunoglobulin-like receptor (KIR) locus profiles in African and South Asian populations. *Genes Immun* 2002;3:86-95.
2. Velickovic M, Velickovic Z, Dunckley H. Diversity of killer cell immunoglobulin-like receptor genes in Pacific Islands populations. *Immunogenetics* 2006;58:523–532.
3. Middleton D, Meenagh A, Moscoso J, et al. Killer immunoglobulin receptor gene and allele frequencies in Caucasoid, Oriental and Black populations from different continents. *Tissue Antigens* 2008;71:105-113.

**KIR Exchange Sample: KDNA # 0140:**

The consensus KIR type for this Black sample is KIR2DL1-2DL2-2DL4-2DL5B-3DL1-3DL2-3DL3-2DS2-2DS3-2DS4FULL&DEL-2DS5-2DP1-3DP1DEL. One lab reported this sample as positive for 3DS1, 1 lab reported 2DS1 as positive, and 1 lab reported 2DS2, 2DS4, and 3DP1 as negative. Hartzman and Hurley commented that a new 2DL5B allele may be present. The genotype in this sample is observed exclusively in African populations, with the highest frequency occurring among African Americans, 3.5% (1,5).

4. Rajalingam R, Du Z, Meenagh A, et al. Distinct diversity of KIR genes in three southern Indian populations: comparison with world populations revealed a link between KIR gene content and pre-historic human migrations. *Immunogenetics* 2008;60:207-217.
5. Middleton, D. and Gonzelez, F. The extensive polymorphism of KIR genes. *Immunology* 2010;129:8–19.

**NEXT MAILING DATE: February 4, 2015**

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KIR Ex.	DNA	Reporting Labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
#35	137	75	POS[75]	POS[74] <i>NEG[1]</i>	POS[56] <i>*010[5]</i> <i>NEG[12]</i> NT[2]	POS[73] NT[2]	NEG[75]	POS[73] <i>*015[1]</i> <i>*001[1]</i>	POS[74] NT[1]	POS[73] NT[2]	NEG[75]	NEG[74] <i>POS[1]</i>	POS[74] <i>NEG[1]</i>	NEG[72] <i>POS[3]</i>	POS[46] FULL[27] WT[1] DEL[1]	NEG[75]	POS[73] NT[2]	POS[61] FULL, DEL[11] NT [3]
	138	75	POS[73] <i>NEG[1]</i> NT[1]	NEG[71] <i>POS[3]</i> NT[1]	POS[73] <i>NEG[1]</i> NT[1]	POS[72] NT[3]	POS[52] B[16] B*00201[1] B*003/ *00602[2] B*002, *002/ *009/ *016[2] <i>NEG[2]</i> NT[1]	POS[72] <i>*001[1]</i> <i>*01502,</i> <i>*020[1]</i> NT[1]	POS[73] NT[2]	POS[72] <i>NT[3]</i>	NEG[74] NT[1]	NEG[74] NT[1]	NEG[73] <i>POS[1]</i> NT[1]	POS[73] <i>NEG[1]</i> NT[1]	POS[44] FULL[27] WT[1] DEL[1] <i>NEG [1]</i> NT[1]	NEG[74] NT[1]	POS[71] <i>NEG[1]</i> NT[3]	POS[52] DEL[18] <i>NEG[1]</i> NT[4]
	139	75	NEG[74] <i>POS[1]</i>	POS[74] <i>NEG[1]</i>	NEG[73] <i>POS[2]</i>	POS[73] NT[2]	NEG[75]	POS[73] <i>*001[2]</i>	POS[74] NT[1]	POS[73] NT[2]	NEG[75]	NEG[74] <i>POS[1]</i>	POS[74] <i>NEG[1]</i>	NEG[73] <i>POS[2]</i>	POS[45] DEL[28] FULL [1] <i>NEG[1]</i>	NEG[75]	NEG[72] NT[2]	POS[56] FULL[15] FULL/ DEL[1] NT[3]
	140	75	POS[75]	POS[75]	NEG[74] NT[1]	POS[73] NT[2]	POS[54] B[19] B*002, *004/ *008/ *013/ *014/ *015[1] B*002, B*006*[1]	POS[73] <i>*001,</i> <i>*017[1]</i> <i>*001[1]</i>	POS[74] NT[1]	POS[73] NT[2]	NEG[74] <i>POS[1]</i>	NEG[74] <i>POS[1]</i>	POS[74] <i>NEG[1]</i>	POS[75]	POS[54] FULL, DEL[17] WT, DEL[1] FULL [2] <i>NEG[1]</i>	POS[75]	POS[73] NT[2]	POS[53] DEL[18] <i>NEG[1]</i> NT[3]

**KEY for Table 1**

[ ] - number of labs reporting allele assignment/POS/NEG/NT  
 POS - Presence of gene  
 NEG - Absence of gene  
 NT - Not typed  
*italics* - assignment different from consensus  
 Subtypes of 2DS4 and 3DP1 are designated as FULL and/or DEL

**KEY for Tables 2-5**

*italics* - assignment different from consensus  
 SSP - Sequence-specific priming-based typing  
 SSOP - Sequence-specific oligonucleotide probing-based typing  
 RSSOP - Reverse Sequence-specific oligonucleotide probing-based typing  
 SBT - Sequencing-based typing

**Table 2. KIR Exchange Sample: KDNA #137**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [75]	POS [74]	POS [56] *010[5] NEG[12]	POS [73]	NEG [75]	POS [73]	POS [74]	POS [73]	NEG [75]	NEG [74]	POS [74]	NEG [72]	POS + FULL [73]	NEG [75]	POS [73]	POS + FULL, DEL [72]	
5488	Adams, Sharon	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
234	Amador, Alexandra	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSO
16	Askar, Medhat Z.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	FULL, DEL	SSP SSO
8073	Bengtsson, Mats	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8038	Cao, Kai	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSO
8025	Carrington, Martin &	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	NT	SSP
1461	Cauwelier, Barbara	POS	POS	*010	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
774	Cecka, J. Michael	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
3224	Chen, Dong-Feng	POS	POS	*010	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
3632	Colombe, Beth W.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	FULL, DEL	SSP
769	Coppage, Myra	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP SSO
189	Crowe, Deborah	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
8039	Davidson, Maurine	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
124	De Santis, Dianne	POS	NEG	NEG	POS	NEG	POS	POS	POS	NEG	POS	POS	NEG	POS	NEG	NT	NT	SSO
8031	Dinauer, David	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	POS	FULL	NEG	POS	FULL, DEL	SSP
705	Ellis, Thomas	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8051	Endres, Robert O.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
2549	Fagoaga, Omar	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
762	Fischer, Gottfried	POS	POS	*010	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
1778	Freed, Brian	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
8047	Fuessel, Monika	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8026	Gardiner, Clair M.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
1647	Gautreaux, Michael	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
4985	Graff, Ralph J.	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8022	Hedlund, Anna	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	FULL, DEL	SSP
1694	Hesse, Kissel &	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
3808	Hogan, Patrick	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	FULL, DEL	SSP
5000	Hsu, Susan H.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
2344	Hurley, Hartzman&	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP SSO
8077	IMMCO Diagnostics	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
3261	Iwaki, Yuichi	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
794	Jaatinen, Taina	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8076	Jaramillo, Gaitonde &	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
859	Kamoun, Malek	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	
8035	Kanangat, Siva	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8079	Kashi, Zahra M.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO

**Table 2. KIR Exchange Sample: KDNA #137**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [75]	POS [74]	POS [56] *010[5] NEG[12]	POS [73]	NEG [75]	POS [73]	POS [74]	POS [73]	NEG [75]	NEG [74]	POS [74]	NEG [72]	POS + FULL [73]	NEG [75]	POS [73]	POS + FULL, DEL [72]	
4337	Kim, Tai-Gyu	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8084	Kimball, Pam	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8046	Kusnierczyk, Piotr	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
8071	Kwok, Janette	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
791	Lacelle, Chantale	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	FULL, DEL	SSP
278	Lee, Jar-How	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8088	Liu, Cong	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	
8069	Maha, George	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	FULL, DEL	SSP
8067	Marino, Susana R.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
5142	Marsh, Steven	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	*001	NEG	POS	*001/ *002/ *004, *003	
8091	Murphey, Cathi	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
733	Mytilineos, Joannis	POS	POS	*010	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
5231	Nelson, Karen	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8083	Nikaein, Afzal	POS	POS	POS	POS	NEG	*001	POS	POS	NEG	NEG	POS	NEG	*001	NEG	POS	POS	SSP
1108	Osada, Masako	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSO
3966	Permpikul, Vejbaesya &	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
8030	Poulton, Kay	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8050	Raja, Rajalingam	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
3753	Reed, Elaine F.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	
3798	Reinsmoen, Nancy L.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8064	Roberts, Chrissy H.	ONE COPY	ONE COPY	ONE COPY	POS	NEG	POS	POS	POS	NEG	NEG	ONE COPY	NEG	FULL	NEG	POS	FULL, DEL	SSP
8090	Rossi, Angela	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
8060	Rost, Klein &	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
4251	Schiller, Jennifer	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
3410	Schroeder, M.L.	POS	POS	*010	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
1426	Senitzer, David	POS	POS	NT	POS	NEG	*015	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
8085	Shalini, Pereira	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	
702	Spannagl, Michael	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO
2518	Tambur, Anat	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSO
5451	Tilanus, Marcel G.J.	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
8024	Trowsdale, John	POS	POS		NT	NEG	POS	NT	NT	NEG	NEG	POS	NEG	WT	NEG	POS	FULL, DEL	SSP
5462	Turner, E.V.	POS	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP
8053	Tyan, Fernandez-Vina &	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	POS	POS	SSP SSO
8028	Uhrberg, Markus	POS	POS	POS	NT	NEG	POS	POS	NT	NEG	NEG	POS	NEG	POS	NEG	NT	NT	SSP
3775	Vidan-Jeras, Blanka	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP

**Table 2. KIR Exchange Sample: KDNA #137**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	<b>Consensus</b>	<b>POS [75]</b>	<b>POS [74]</b>	<b>POS [56] *010[5] NEG[12]</b>	<b>POS [73]</b>	<b>NEG [75]</b>	<b>POS [73]</b>	<b>POS [74]</b>	<b>POS [73]</b>	<b>NEG [75]</b>	<b>NEG [74]</b>	<b>POS [74]</b>	<b>NEG [72]</b>	<b>POS + FULL [73]</b>	<b>NEG [75]</b>	<b>POS [73]</b>	<b>POS + FULL, DEL [72]</b>	
8023	Vilches, Carlos	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	POS	FULL, DEL	SSP
5282	Yu, Neng	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP
1466	Yu, Neng	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSO
713	Zachary, Andrea	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	POS	POS	SSP SSO

**Table 3. KIR Exchange Sample: KDNA #138**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [73]	NEG [71]	POS [73]	POS [72]	POS + B [72]	POS [72]	POS [73]	POS [72]	NEG [74]	NEG [74]	NEG [73]	POS [73]	POS FULL [71]	NEG [74]	POS [71]	POS + DEL [70]	
5488	Adams, Sharon	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
234	Amador, Alexandra	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
16	Askar, Medhat Z.	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP SSO
8073	Bengtsson, Mats	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
8038	Cao, Kai	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSO
8025	Carrington, Martin &	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	NT	SSP
1461	Cauwelier, Barbara	POS	NEG	POS	POS	B*003/ *00602	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
774	Cecka, J. Michael	POS	NEG	POS	POS	NEG	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
3224	Chen, Dong-Feng	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
3632	Colombe, Beth W.	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
769	Coppage, Myra	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSP SSO
189	Crowe, Deborah	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
8039	Davidson, Maurine	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
124	De Santis, Dianne	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	NT	NT	SSO
8031	Dinauer, David	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
705	Ellis, Thomas	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
8051	Endres, Robert O.	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
2549	Fagoaga, Omar	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
762	Fischer, Gottfried	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
1778	Freed, Brian	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
8047	Fuessel, Monika	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
8026	Gardiner, Clair M.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	NEG	POS	NEG	SSP
1647	Gautreaux, Michael	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
4985	Graff, Ralph J.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
8022	Hedlund, Anna	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	DEL	SSP
1694	Hesse, Kassel &	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
3808	Hogan, Patrick	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
5000	Hsu, Susan H.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
2344	Hurley, Hartzman&	POS	NEG	POS	POS	B*00201	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSP SSO
8077	IMMCO Diagnostics	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
3261	Iwaki, Yuichi	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
794	Jaatinen, Taina	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
8076	Jaramillo, Gaitonde &	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSP
859	Kamoun, Malek	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	
8035	Kanangat, Siva	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	SSO
8079	Kashi, Zahra M.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
4337	Kim, Tai-Gyu	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
8084	Kimball, Pam	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP

**Table 3. KIR Exchange Sample: KDNA #138**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [73]	NEG [71]	POS [73]	POS [72]	POS + B [72]	POS [72]	POS [73]	POS [72]	NEG [74]	NEG [74]	NEG [73]	POS [73]	POS FULL [71]	NEG [74]	POS [71]	POS + DEL [70]	
8046	Kusnierczyk, Piotr	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSP
8071	Kwok, Janette	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
791	Lacelle, Chantale	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
278	Lee, Jar-How	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
8088	Liu, Cong	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	
8069	Maha, George	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
8067	Marino, Susana R.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
5142	Marsh, Steven	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	*001	NEG	POS	*003	
8091	Murphey, Cathi	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
733	Mytilineos, Joannis	POS	NEG	POS	POS	B*003/ *00602	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSP
5231	Nelson, Karen	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
8083	Nikaein, Afzal	POS	NEG	POS	POS	POS	*001	POS	POS	NEG	NEG	NEG	POS	*001	NEG	POS	POS	SSP
1108	Osada, Masako	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSO
3966	Permpikul, Vejbaesya &	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
8030	Poulton, Kay	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
8050	Raja, Rajalingam	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
3753	Reed, Elaine F.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	
3798	Reinsmoen, Nancy L.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
8064	Roberts, Chrissy H.	TWO COPIES	NEG	ONE COPY	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
8090	Rossi, Angela	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
8060	Rost, Klein &	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
4251	Schiller, Jennifer	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
3410	Schroeder, M.L.	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP
1426	Senitzer, David	POS	NEG	POS	POS	B*002, B*002/ *009/ *016	*01502,* 020	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSP
8085	Shalini, Pereira	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	
702	Spannagl, Michael	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO
2518	Tambur, Anat	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSO
5451	Tilanus, Marcel G.J.	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
8024	Trowsdale, John	POS	NEG	POS	NT	POS	POS	NT	NT	NEG	NEG	NEG	POS	WT	NEG	POS	DEL	SSP
5462	Turner, E.V.	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	POS	SSP
8053	Tyan, Fernandez-Vina &	POS	NEG	POS	POS	B	POS	POS	POS	NEG	NEG	NEG	POS	FULL	NEG	POS	DEL	SSP SSO
8028	Uhrberg, Markus	POS	NEG	POS	NT	POS	POS	POS	NT	NEG	NEG	NEG	POS	POS	NEG	NT	NT	SSP
3775	Vidan-Jeras, Blanka	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
8023	Vilches, Carlos	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	DEL	NEG	POS	DEL	SSP



**Table 3. KIR Exchange Sample: KDNA #138**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [73]	NEG [71]	POS [73]	POS [72]	POS + B [72]	POS [72]	POS [73]	POS [72]	NEG [74]	NEG [74]	NEG [73]	POS [73]	POS FULL [71]	NEG [74]	POS [71]	POS + DEL [70]	
5282	Yu, Neng	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP
1466	Yu, Neng	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSO
713	Zachary, Andrea	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	NEG	POS	POS	SSP SSO

**Table 4. KIR Exchange Sample: KDNA #139**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	NEG [74]	POS [74]	NEG [73]	POS [73]	NEG [75]	POS [73]	POS [74]	POS [73]	NEG [75]	NEG [74]	POS [74]	NEG [73]	POS + DEL[73]	NEG [75]	NEG [72]	POS + FULL[71]	
5488	Adams, Sharon	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
234	Amador, Alexandra	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
16	Askar, Medhat Z.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP SSO
8073	Bengtsson, Mats	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8038	Cao, Kai	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSO
8025	Carrington, Martin &	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	NT	SSP
1461	Cauwelier, Barbara	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
774	Cecka, J. Michael	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
3224	Chen, Dong-Feng	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
3632	Colombe, Beth W.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
769	Coppage, Myra	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP SSO
189	Crowe, Deborah	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
8039	Davidson, Maurine	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
124	De Santis, Dianne	POS	NEG	NEG	POS	NEG	POS	POS	POS	NEG	POS	POS	NEG	POS	NEG	NT	NT	SSO
8031	Dinauer, David	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FUL, DEL	SSP
705	Ellis, Thomas	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8051	Endres, Robert O.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
2549	Fagoaga, Omar	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
762	Fischer, Gottfried	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP
1778	Freed, Brian	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP
8047	Fuessel, Monika	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8026	Gardiner, Clair M.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	NEG	POS	NEG	NEG	NEG	POS	SSP
1647	Gautreaux, Michael	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
4985	Graff, Ralph J.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8022	Hedlund, Anna	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	FULL	SSP
1694	Hesse, Kissel &	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
3808	Hogan, Patrick	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
5000	Hsu, Susan H.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
2344	Hurley, Hartzman&	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP SSO
8077	IMMCO Diagnostics	NEG	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	NEG	POS	SSP
3261	Iwaki, Yuichi	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
794	Jaatinen, Taina	NEG	POS	POS	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8076	Jaramillo, Gaitonde &	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP
859	Kamoun, Malek	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8035	Kanangat, Siva	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8079	Kashi, Zahra M.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
4337	Kim, Tai-Gyu	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8084	Kimball, Pam	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8046	Kusnierczyk, Piotr	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP

**Table 4. KIR Exchange Sample: KDNA #139**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	NEG [74]	POS [74]	NEG [73]	POS [73]	NEG [75]	POS [73]	POS [74]	POS [73]	NEG [75]	NEG [74]	POS [74]	NEG [73]	POS + DEL[73]	NEG [75]	NEG [72]	POS + FULL[71]	
8071	Kwok, Janette	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
791	Lacelle, Chantale	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
278	Lee, Jar-How	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8088	Liu, Cong	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	
8069	Maha, George	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
8067	Marino, Susana R.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
5142	Marsh, Steven	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	*003/ *004/ *006/ *007	NEG	NEG	*001/ *002/ *004	
8091	Murphey, Cathi	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
733	Mytilineos, Joannis	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP
5231	Nelson, Karen	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8083	Nikaein, Afzal	NEG	POS	NEG	POS	NEG	*001	POS	POS	NEG	NEG	POS	NEG	*003	NEG	NEG	*001	SSP
1108	Osada, Masako	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSO
3966	Permpikul, Vejbaesya &	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8030	Poulton, Kay	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8050	Raja, Rajalingam	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
3753	Reed, Elaine F.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	
3798	Reinsmoen, Nancy L.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8064	Roberts, Chrissy H.	NEG	TWO COPIES	NEG	POS	NEG	POS	POS	POS	NEG	NEG	TWO COPIES	NEG	DEL	NEG	NEG	FULL	SSP
8090	Rossi, Angela	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
8060	Rost, Klein &	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
4251	Schiller, Jennifer	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
3410	Schroeder, M.L.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP
1426	Senitzer, David	NEG	POS	NEG	POS	NEG	*001	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP
8085	Shalini, Pereira	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	
702	Spannagl, Michael	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO
2518	Tambur, Anat	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSO
5451	Tilanus, Marcel G.J.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
8024	Trowsdale, John	NEG	POS	NEG	NT	NEG	POS	NT	NT	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP
5462	Turner, E.V.	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	POS	SSP
8053	Tyan, Fernandez-Vina &	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	DEL	NEG	NEG	FULL	SSP SSO
8028	Uhrberg, Markus	NEG	POS	NEG	NT	NEG	POS	POS	NT	NEG	NEG	POS	NEG	POS	NEG	NT	NT	SSP
3775	Vidan-Jeras, Blanka	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
8023	Vilches, Carlos	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	FULL	NEG	NEG	FULL	SSP
5282	Yu, Neng	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP
1466	Yu, Neng	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSO
713	Zachary, Andrea	NEG	POS	NEG	POS	NEG	POS	POS	POS	NEG	NEG	POS	NEG	POS	NEG	NEG	POS	SSP SSO

**Table 5. KIR Exchange Sample: KDNA #140**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [75]	POS [75]	NEG [74]	POS [73]	POS [54] B [19]	POS [73]	POS [74]	POS [73]	NEG [74]	NEG [74]	POS [74]	POS [75]	POS + FULL, DEL [71]	POS [75]	POS [73]	POS + DEL [71]	
5488	Adams, Sharon	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP
234	Amador, Alexandra	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
16	Askar, Medhat Z.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	DEL	SSP SSO
8073	Bengtsson, Mats	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
8038	Cao, Kai	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL	POS	POS	POS	SSO
8025	Carrington, Martin &	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	NT	SSP
1461	Cauwelier, Barbara	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP
774	Cecka, J. Michael	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
3224	Chen, Dong-Feng	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
3632	Colombe, Beth W.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	DEL	SSP
769	Coppage, Myra	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	POS	SSP SSO
189	Crowe, Deborah	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
8039	Davidson, Maurine	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
124	De Santis, Dianne	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	NT	NT	SSO
8031	Dinauer, David	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	DEL	SSP
705	Ellis, Thomas	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8051	Endres, Robert O.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
2549	Fagoaga, Omar	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
762	Fischer, Gottfried	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP
1778	Freed, Brian	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP
8047	Fuessel, Monika	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
8026	Gardiner, Clair M.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	NEG	POS	POS	NEG	SSP
1647	Gautreaux, Michael	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
4985	Graff, Ralph J.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
8022	Hedlund, Anna	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP
1694	Hesse, Kissel &	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
3808	Hogan, Patrick	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	DEL	SSP
5000	Hsu, Susan H.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
2344	Hurley, Hartzman&	POS	POS	NEG	POS	B*002, B*006	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	POS	SSP SSO
8077	IMMCO Diagnostics	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	SSP
3261	Iwaki, Yuichi	POS	POS	NT	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
794	Jaatinen, Taina	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
8076	Jaramillo, Gaitonde &	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	POS	SSP
859	Kamoun, Malek	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8035	Kanangat, Siva	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8079	Kashi, Zahra M.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
4337	Kim, Tai-Gyu	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
8084	Kimball, Pam	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP

**Table 5. KIR Exchange Sample: KDNA #140**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [75]	POS [75]	NEG [74]	POS [73]	POS [54] B [19]	POS [73]	POS [74]	POS [73]	NEG [74]	NEG [74]	POS [74]	POS [75]	POS + FULL, DEL [71]	POS [75]	POS [73]	POS + DEL [71]	
8046	Kusnierczyk, Piotr	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	POS	SSP
8071	Kwok, Janette	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
791	Lacelle, Chantale	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	DEL	SSP
278	Lee, Jar-How	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8088	Liu, Cong	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	
8069	Maha, George	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	DEL	SSP
8067	Marino, Susana R.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
5142	Marsh, Steven	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*003/ *004/ *006/ *007	POS	POS	*003	
8091	Murphey, Cathi	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
733	Mytilineos, Joannis	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	POS	SSP
5231	Nelson, Karen	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8083	Nikaain, Afzal	POS	POS	NEG	POS	POS	*001	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
1108	Osada, Masako	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	POS	SSO
3966	Permpikul, Vejbaesya &	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
8030	Poulton, Kay	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8050	Raja, Rajalingam	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP
3753	Reed, Elaine F.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	
3798	Reinsmoen, Nancy L.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8064	Roberts, Chrissy H.	TWO COPIES	TWO COPIES	NEG	POS	POS	POS	POS	POS	NEG	NEG	TWO COPIES	POS	FULL, DEL	POS	POS	DEL	SSP
8090	Rossi, Angela	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
8060	Rost, Klein &	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
4251	Schiller, Jennifer	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
3410	Schroeder, M.L.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP
1426	Senitzer, David	POS	POS	NEG	POS	B*002, *004/ *008/ *013/ *014/ *015	*001, *017	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	POS	SSP
8085	Shalini, Pereira	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	
702	Spannagl, Michael	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO
2518	Tambur, Anat	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL	POS	POS	POS	SSO
5451	Tilanus, Marcel G.J.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
8024	Trowsdale, John	POS	POS	NEG	NT	POS	POS	NT	NT	NEG	NEG	POS	POS	WT, DEL	POS	POS	DEL	SSP
5462	Turner, E.V.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
8053	Tyan, Fernandez-Vina &	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	DEL	SSP SSO
8028	Uhrberg, Markus	POS	POS	NEG	NT	POS	POS	POS	NT	NEG	NEG	POS	POS	POS	POS	NT	NT	SSP
3775	Vidan-Jeras, Blanka	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP

**Table 5. KIR Exchange Sample: KDNA #140**

CTR	Investigator	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	Method
	Consensus	POS [75]	POS [75]	NEG [74]	POS [73]	POS [54] B [19]	POS [73]	POS [74]	POS [73]	NEG [74]	NEG [74]	POS [74]	POS [75]	POS + FULL, DEL [71]	POS [75]	POS [73]	POS + DEL [71]	
8023	Vilches, Carlos	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	POS	POS	DEL	SSP
5282	Yu, Neng	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP
1466	Yu, Neng	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSO
713	Zachary, Andrea	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	POS	POS	SSP SSO

**PARTICIPATING CENTERS**

Name			City/State	Country	Name			City/State	Country
Adams	Sharon		Bethesda MD		Klein	Rost/	Drs	Martinsried	Germany
Amador	Alexandra		Miami FL		Kusnierczyk	Piotr	PhD	Wroclaw	Poland
Askar	Medhat	MD PhD	Cleveland OH		Kwok	Janette	Dr	Hong Kong	
Balazs	Ray/		Stamford CT		Lacelle	Chantale	PhD	Dallas TX	
Cao	Kai	Dr	Houston TX		Lee	Jar-How	Dr	Canoga Park CA	
Carrington/Martin		Drs	Frederick MD		Liu	Cong	PhD	Grand Rapids MI	
Cauwelier	Barbara	Dr	Brugge	Belgium	Maha	George	PhD	Burlington NC	
Cecka	J. Michael	PhD	Honolulu HI		Marino	Susana R		Chicago IL	
Colombe	Beth	PhD	Philadelphia PA		Marsh	Steven	Dr	London	England
Tavoularis	Sofia	Dr	Ottawa ON	Canada	Masako	Osada		Stamford CT	
Crowe	Deborah	PhD	Nashville TN		Murphey	Cathi	PhD	San Antonio TX	
Davidson	Maureen		Minneapolis MN		Mytilineos	Joannis	MD	Ulm	Germany
De Santis	Dianne	Dr	Perth	Australia	Nelson	Karen		Seattle WA	
Dinauer	David		Brown Deer WI		Nikaein	Afzal	Dr	Dallas TX	
Ellis	Thomas	Dr	Madison WI		Poulton	Kay V.	Dr	Manchester	England
Endres	Robert	Dr	Tempe AZ		Raja	Rajalingam	Dr	San Francisco CA	
Fagoaga	Omar	Dr	Detroit MI		Reed	Elaine F.	Dr	Los Angeles CA	
Fischer	Gottfried	Dr	Vienna	Austria	Roberts	Chrissy H.		London	England
Freed	Brian	Dr	Aurora CO		Rossi	Angela	Dr	Piacenza	Italy
Fuessel	Monika	PhD	Dresden	Germany	Schiller	Jennifer	PhD	Milwaukee WI	
Gardiner	Clair M.	PhD	Dublin	Ireland	Schroeder	M.L.	MD	Winnipeg MB	Canada
Gautreaux	Michael	Dr	Winston-Salem NC		Senitzer	David	PhD	Duarte CA	
Graff	Ralph J.	Dr	St Louis MO		Shalini	Pereira		Seattle WA	
Hedlund	Ann		Saltsjobaden	Sweden	Shanahan	Thomas	PhD	Buffalo NY	
Kissel	Hesse &		Lich	Germany	Spannagl	Michael	Dr	Munchen	Germany
Hogan	Patrick	Dr	Herston	Australia	Tambur	Anat		Chicago IL	
Hsu	Susan H.	PhD	Philadelphia PA		Tiercy	Jean-Marie	Dr	Geneva	Switzerland
Hartzman	Hurley/	Drs	Rockville MD		Tilanus	Marcel G.J.	Dr	Maastricht	Germany
IMMCO Diagnostics			Buffalo NY		Trowsdale	John	Prof	Cambridge	England
Iwaki	Yui	Dr	San Bernardino CA		Turner	E.V.	PhD	Memphis TN	
Jaatinene	Taina	Dr	Helsinki	Finland	Tyan	Fernandez-Vina/	Dr	Palo Alto CA	
Jaramillo	Gaitonde&	Drs	Chicago IL		Uhrberg	Markus	Dr	Dusseldorf	Germany
Pan	Jie		Shanghai	China	Vidan-Jeras	Blanka		Ljubljana	Slovenia
Kamoun	Malek	MD	Philadelphia PA		Vilches	Carlos	Dr	Madrid	Spain
Kanangat	Siva	PhD	Chicago IL		Yu	Neng	MD	Dedham MA	
Kashi	Zahra	Dr	Portland OR		Yu	Neng	MD	Worcester MA	
Kim	Tai-Gyu	Prof	Seoul	S. Korea	Zachary	Andrea	PhD	Baltimore MD	