

# REPORT OF THE 22<sup>nd</sup> UCLA INTERNATIONAL KIR EXCHANGE

AUGUST 4, 2010

KIR

85-88

Dear Colleagues:

For the 22<sup>nd</sup> KIR Exchange, 4 DNA samples (KDNA#85-88) were shipped to each laboratory on March 10, 2010. Fifty-nine laboratories submitted their KIR typing results. The majority of the laboratories used either commercial or in-house developed sequence-specific primer (SSP) based PCR typing systems, and others used sequence-specific oligonucleotide probing (SSOP) method.

The results for the 22<sup>nd</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 KIR2DL2, 2DL5, 3DL1, 3DS1, 2DS1, 2DS4, and/or 3DP1 loci were reported by some laboratories. The positive/negative

assignments for all four DNA samples were reported without any discrepancy for 9 of the 16 tested KIR loci (KIR2DL1, 2DL4, 2DL5, 3DL2, 3DL3, 2DS1, 2DS5, 2DP1, and 3DP1). 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 encourage the participating laboratories to resolve the discrepancies so that the information can be shared to develop reliable KIR typing systems.

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

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## **KIR Exchange Sample: KDNA # 0085:**

KDNA#85 was isolated from a Caucasian donor. The consensus KIR type of this DNA is: 2DL1-2DL3-2DL4-2DL5A-3DL2-3DL3-3DS1-2DS1-2DS5-2DP1-3DP1. One laboratory reported this sample as also positive for three additional KIRs, 2DL2, 2DS2, and 2DS3. Kusnierczyk reported that 2DS4 was negative by both multiplex (1) and Inno-Train SSP methods, while 2DS4del was positive by Vilches's SSP typing method (2). This genotype occurs most frequently in Natives of America (Bari, 10%), India (Kanikar, 5.5%; Paravar, 3.9%) and Iran (Persian, 4.4%) (3-5), but totally absent in populations of African origin (6).

## **KIR Exchange Sample: KDNA # 0086:**

KDNA#86 was also isolated from a Caucasian individual. The consensus KIR type is reported as 2DL1-2DL2-2DL4-2DL5B-3DL1-3DL2-3DL3-2DS2-2DS3-2DS4-2DP1-3DP1. One laboratory reported this sample as negative for both 2DL3 and 3DS1. This genotype is most frequently observed in Asian Indian and Iranian populations (4,5), but absent in Northeast Asians (7-9), Native American and Mexican populations (3,10).

## **KIR Exchange Sample: KDNA # 0087:**

The ethnic information for KDNA#87 was not available. The consensus KIR type of this sample is: 2DL1-2DL3-2DL4-2DL5A-3DL1-3DL2-3DL3-3DS1-2DS1-2DS4-2DS5-2DP1-3DP1. Two laboratories that used only the multiplexed SSP typing method (1) reported this DNA as KIR3DL1-negative, and another laboratory typed it as negative for KIR2DS4. This genotype occurs at a frequency of 2.6% in Pakistani and Trinidad Asian populations and in populations of Singapore at a frequency of 2.4% (6,11).

## **KIR Exchange Sample: KDNA # 0088:**

There was no ethnic information available for KDNA#88. The consensus KIR type of this sample is: 2DL1-2DL3-2DL4-2DL5A-3DL2-3DL3-3DS1-2DS1-2DS3-2DS5-2DP1-3DP1. Two laboratories reported this sample as positive for 2DL2 and one reported it positive for 2DS2. Klein and Rost observed weak reactivity with probes for 2DL2 suggesting the presence of a rare or new 2DL2 allele. Kusnierczyk reported the same conflicting results as in KIR#85 for 2DS4; 2DS4 was negative by both multiplex SSP (1) and Inno-Train SSP, but was positive for 2DS4del using primers described by Vilches et al. (2). This genotype occurs in most populations at low frequencies(10).

## References

1. Sun, J. Y., L. Gaidulis, M. M. Miller, R. M. Goto, R. Rodriguez, S. J. Forman, and D. Senitzer. 2004. Development of a multiplex PCR-SSP method for Killer-cell immunoglobulin-like receptor genotyping. *Tissue Antigens* 64:462.
2. Vilches, C., J. Castano, N. Gomez-Lozano, and E. Estefania. 2007. Facilitation of KIR genotyping by a PCR-SSP method that amplifies short DNA fragments. *Tissue Antigens* 70:415.
3. Gendzekhadze, K., P. J. Norman, L. Abi-Rached, Z. Layrisse, and P. Parham. 2006. High KIR diversity in Amerindians is maintained using few gene-content haplotypes. *Immunogenetics* 58:474.
4. Rajalingam, R., Z. Du, A. Meenagh, L. Luo, V. J. Kavitha, R. Pavithra-Arulvani, A. Vidhyalakshmi, S. K. Sharma, I. Balazs, E. F. Reed, R. M. Pitchappan, and D. Middleton. 2008. 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* 60:207.
5. Ashouri, E., S. Farjadian, E. F. Reed, A. Ghaderi, and R. Rajalingam. 2009. KIR gene content diversity in four Iranian populations. *Immunogenetics* 61:483.
6. 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* 3:86.
7. Jiang, K., F. M. Zhu, Q. F. Lv, and L. X. Yan. 2005. Distribution of killer cell immunoglobulin-like receptor genes in the Chinese Han population. *Tissue Antigens* 65:556.
8. Whang, D. H., H. Park, J. A. Yoon, and M. H. Park. 2005. Haplotype analysis of killer cell immunoglobulin-like receptor genes in 77 Korean families. *Hum Immunol* 66:146.
9. Yawata, M., N. Yawata, K. L. McQueen, N. W. Cheng, L. A. Guethlein, R. Rajalingam, H. G. Shilling, and P. Parham. 2002. Predominance of group A KIR haplotypes in Japanese associated with diverse NK cell repertoires of KIR expression. *Immunogenetics* 54:543.
10. Yawata, M., N. Yawata, L. Abi-Rached, and P. Parham. 2002. Variation within the human killer cell immunoglobulin-like receptor (KIR) gene family. *Crit Rev Immunol* 22:463.
11. Lee, Y. C., S. H. Chan, and E. C. Ren. 2008. Asian population frequencies and haplotype distribution of killer cell immunoglobulin-like receptor (KIR) genes among Chinese, Malay, and Indian in Singapore. *Immunogenetics* 60:645.

**NEXT MAILING DATE: February 2, 2011**

*Arlene Locke, Marie Lau, Elaine F. Reed, and Rajalingam Raja*

**Table 1. Summary of the 22nd KIR Exchange (KDNA#85-88)**

KIR Ex.	DNA	# reporting labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
#22	#0085	59	POS NT [1]	NEG NT [1] <i>POS [1]</i>	POS NT [1]	POS NT [3]	POS A [16] A*001/*005 [4] A*001 [2] NT [1]	NEG NT [1]	POS NT [2]	POS NT [3]	POS *01301 [1] NT [1]	POS *002-*004 [1] NT [1]	NEG NT [1] <i>POS [1]</i>	NEG NT [1] <i>POS [1]</i>	NEG NT [1]	POS NT [1]	POS NT [4]	POS *003 [18] *00301/*00302 [2] *003/*005/*006 [2] DEL [1] NT [4]
	#0086	59	POS	POS *001-*003/ *005 [2]	NEG <i>POS [1]</i>	POS NT [2]	POS B [16] B*002/*004/*007 [2] B*002 [1] B*002/*003/*004/ *006/*007 [1] B*002/*004/*007, *003,*006 [1] B*002/*009/*010 [1]	POS *00101-*002 [1] *002/*01502 [1]	POS NT [1]	POS NT [2]	NEG <i>POS [1]</i>	NEG	POS	POS	POS FULL, DEL [17] FULL [6]	NEG	POS NT [3]	POS *001/*002/*004, *003 [10] *001-*004 [1] *001/*002/*004/ *007,*003/*005/ *006 [1] FULL, DEL [1] FULL [1] NT [3]
	#0087	59	POS NT [1]	NEG NT [1]	POS NT [1]	POS NT [3]	POS A [16] A*001/*005 [4] A*001 [2] NT [1]	POS NT [1] <i>NEG [2]</i>	POS NT [2]	POS NT [3]	POS NT [1]	POS *002-*004 [1] NT [1]	NEG NT [1]	NEG NT [1]	POS DEL [27] FULL, DEL [2] NT [1] <i>NEG [1]</i>	POS NT [1]	POS NT [4]	POS *003 [18] *00301/*00302 [2] *003/*005/*006 [2] DEL [1] NT [4]
	#0088	59	POS NT [1]	NEG NT [2] <i>POS [2]</i>	POS NT [1]	POS NT [3]	POS A [15] A*001/*005 [4] A*001/*003 [1] A, B [1] A*001/*005, B*002/ *009/*010 [1] NT [1]	NEG NT [1]	POS NT [2]	POS NT [3]	POS *01301 [1] NT [1]	POS *002-*004 [1] NT [1]	NEG NT [1] <i>POS [1]</i>	POS NT [1]	NEG NT [2]	POS NT [1]	POS NT [4]	POS *003 [18] *00301/*00302 [2] *003/*005/*006 [2] DEL [1] NT [4]

**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

**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  
 SBT - Sequencing-based typing

**Table 2. KIR Exchange Sample: KDNA #85 (Caucasian)**

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams,Sharon	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8033	Balazs,Ivan	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
8050	Baxter-Lowe, Lee	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8025	Carrington&Marti	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003/ *005/ *006	SSP
785	Chan,Soh Ha	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	RT-PCR
3224	Chen,Dong-Feng	NT																SSP,SSOP
124	Christiansen&Wit	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NT	NT	MULTIPLEX SSP
3632	Colombe,Beth	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
189	Crowe,Deborah	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8030	Davidson&Poulto	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSOP
8031	Dinauer,David	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
3186	Dunckley,Heathe	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
4251	Ellis,Thomas	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8051	Endres,Robert	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
2549	Fagoaga,Omar	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8038	Fernandez-Vina&	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
762	Fischer&Mayr	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8036	Gillespie,Kathleen	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
8040	Gladman/Pellett/P	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
234	Gomez,Carmen	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
4985	Graff,Ralph J.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8041	Han,Hoon	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*00301/ *00302	SSP
1461	Hidajat,M.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
5000	Hsu,Susan H.	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP,SSP
2344	Hurley&Hartzman	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP, SSOP
4337	Kim,Tai-Gyu	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
836	KuKuruga,Debor	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
8046	Kusnierczyk,Piot	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	NT	NT	MULTIPLEX SSP,SSP
8061	Lanzer,G.	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
1108	Linke,Robert	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
8067	Marino,Susan R.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP,SSOP
5142	Marsh,Steven	POS	NEG	POS	POS	POS	NEG	POS	POS	*01301	POS	NEG	NEG	NEG	POS	POS	*003	SSP,SBT
733	Mytilineos,Joanni	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
8039	Noreen,Harriet	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
8022	Olerup,Olle	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
3966	Permpikul&Vejsa	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
16	Pidwell/Askar	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP,SSP
3753	Reed&Rajalingam	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP

Table 2. KIR Exchange Sample: KDNA #85 (Caucasian)																		
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
8064	Roberts,Chrissey	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	WGA-SSP
8060	Rost&Klein	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
1694	Sauer&Gottwald	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
3410	Schroeder,M.L.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
1426	Senitzer,David	POS	NEG	POS	POS	*001	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	MULTIPLEX SSP
769	Tavoularis,Sofia	POS	NEG	POS	POS	A*001	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003/ *005/ *006	SSOP,SSP
230	Thoni,Deborah	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
747	Tiercy,Jean-Marie	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*00301/ *00302	SSP
5451	Tilanus,Marcel	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
4021	Trachtenberg,Eliz	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	MALDI-TOF
8024	Trowsdale,John	POS	NEG	POS	NT	POS	NEG	NT	NT	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
5462	Turner,E.V.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	*002- *004	NEG	NEG	NEG	POS	POS	POS	SSP
8053	Tyan,Dolly	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
8028	Uhrberg,Markus	POS	NEG	POS	NT	POS	NEG	POS	NT	POS	POS	NEG	NEG	NEG	POS	NT	NT	SSP
3775	Vidan-Jeras,Blan	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
8023	Vilches,Carlos	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	DEL	SSP
8047	Wassmuth,Ralf	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSP
705	Watkins,David I.	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
1466	Yu,Neng	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	POS	SSOP
5282	Yu_Neng/UMMHC	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP
713	Zachary,Andrea	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	NEG	NEG	POS	POS	*003	SSP

**Table 3. KIR Exchange Sample: KDNA #86(Caucasian)**

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams,Sharon	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8033	Balazs,Ivan	POS	*001- *003/ *005	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*00101- *00103, *003/ *004/ *006-*009	NEG	POS	POS	SSOP
8050	Baxter-Lowe, Lee	POS	POS	NEG	POS	B*002/ *004/ *007, B*003/ *006	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8025	Carrington&Marti	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	NEG	POS	*001/ *002/ *004/ *007, *003/ *005/ *006	SSP
785	Chan,Soh Ha	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	RT-PCR
3224	Chen,Dong-Feng	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP,SSOP
124	Christiansen&Wit	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	NT	NT	MULTIPLEX SSP
3632	Colombe,Beth	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
189	Crowe,Deborah	POS	POS	NEG	POS	B*002/ *004/ *007	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8030	Davidson&Poulto	POS	POS	POS	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	SSOP
8031	Dinauer,David	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	*001/ *002, *003-*007	NEG	POS	*001/ *002/ *004, *003	SSP
3186	Dunckley,Heathe	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
4251	Ellis,Thomas	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	NEG	POS	*001/ *002/ *004, *003	SSP
8051	Endres,Robert	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	*001-*007	NEG	POS	*001-*004	SSP
2549	Fagoaga,Omar	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL	NEG	POS	FULL	SSP
8038	Fernandez-Vina&	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*001, *003/ *006/ *007- *009	NEG	POS	POS	SSOP
762	Fischer&Mayr	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8036	Gillespie,Kathleen	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8040	Gladman/Pellett/P	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
234	Gomez,Carmen	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
4985	Graff,Ralph J.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	*001/ *002, *003/ *007	NEG	POS	*001/ *002/ *004, *003	SSP
8041	Han,Hoon	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
1461	Hidajat,M.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL	NEG	POS	POS	SSP
5000	Hsu,Susan H.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP,SSP
2344	Hurley&Hartzman	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP, SSOP

**Table 3. KIR Exchange Sample: KDNA #86(Caucasian)**

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
4337	Kim,Tai-Gyu	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
836	KuKuruga,Debor	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8046	Kusnierczyk,Piot	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	NEG	NT	NT	MULTIPLEX SSP, SSP
8061	Lanzer,G.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
1108	Linke,Robert	POS	*001- *003/ *005	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*00101- *00103, *003/ *004/ *006-009	NEG	POS	POS	SSOP
8067	Marino,Susan R.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	NEG	POS	POS	SSP,SSOP
5142	Marsh,Steven	POS	POS	NEG	POS	POS	*00101, *002	POS	POS	NEG	NEG	POS	POS	*001, *003/ *004/ *006/ *007/ *009	NEG	POS	*001/ *002/ *004, *003	SSP,SBT
733	Mytilineos,Joanni	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8039	Noreen,Harriet	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
8022	Olerup,Olle	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
3966	Permpikul&Vejba	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
16	Pidwell/Askar	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP,SSP
3753	Reed&Rajalingam	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
8064	Roberts,Chrissy	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*001, *003/ *004/ *006- *009	NEG	POS	*001/ *002/ *004, *003	WGA-SSP
8060	Rost&Klein	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
1694	Sauer&Gottwald	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
3410	Schroeder,M.L.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	*001/ *002, *003/ *004/ *006	NEG	POS	*001/ *002/ *004, *003	SSP
1426	Senitzer,David	POS	POS	NEG	POS	B*002	*002/ *01502	POS	POS	NEG	NEG	POS	POS	FULL, DEL	-	POS	POS	MULTIPLEX SSP
769	Tavoularis,Sofia	POS	POS	NEG	POS	B*002/ *009/ *010	POS	POS	POS	NEG	NEG	POS	POS	*001/ *006- *009	NEG	POS	POS	SSOP,SSP
230	Thoni,Deborah	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
747	Tiercy,Jean-Marie	POS	POS	NEG	POS	B*002/ *003/ *004/ *006/ *007	POS	POS	POS	NEG	NEG	POS	POS	*001/ *002, *003/ *004/ *006/ *007	NEG	POS	*001/ *002/ *004, *003	SSP
5451	Tilanus,Marcel	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
4021	Trachtenberg,Eliz	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	MALDI-TOF
8024	Trowsdale,John	POS	POS	NEG	NT	POS	POS	NT	NT	NEG	NEG	POS	POS	FULL, DEL	NEG	POS	*001/ *002/ *004, *003	SSP
5462	Turner,E.V.	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8053	Tyan,Dolly	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	*001/ *002, *003-007	NEG	POS	*001/ *002/ *004, *003	SSP
8028	Uhrberg,Markus	POS	POS	NEG	NT	POS	POS	POS	NT	NEG	NEG	POS	POS	POS	NEG	NT	NT	SSP

<b>Table 3. KIR Exchange Sample: KDNA #86(Caucasian)</b>																		
<b>CTR</b>	<b>Investigator Name</b>	<b>2DL1</b>	<b>2DL2</b>	<b>2DL3</b>	<b>2DL4</b>	<b>2DL5</b>	<b>3DL1</b>	<b>3DL2</b>	<b>3DL3</b>	<b>3DS1</b>	<b>2DS1</b>	<b>2DS2</b>	<b>2DS3</b>	<b>2DS4</b>	<b>2DS5</b>	<b>2DP1</b>	<b>3DP1</b>	<b>METHOD</b>
3775	Vidan-Jeras,Blan	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8023	Vilches,Carlos	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	FULL, DEL	NEG	POS	FULL, DEL	SSP
8047	Wassmuth,Ralf	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
705	Watkins,David I.	POS	POS	NEG	POS	B*002/ *004/ *007	POS	POS	POS	NEG	NEG	POS	POS	*001-*004/ *006/ *007	NEG	POS	*001/ *002/ *004, *003	SSP
1466	Yu,Neng	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
5282	Yu_Neng/UMMHC	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
713	Zachary,Andrea	POS	POS	NEG	POS	B	POS	POS	POS	NEG	NEG	POS	POS	FULL	NEG	POS	POS	SSP



**Table 4. KIR Exchange Sample: KDNA #87 (Unknown)**

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams, Sharon	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003-*007	POS	POS	*003	SSP
8033	Balazs, Ivan	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	*00103, *003/ *004/ *006-*009	POS	POS	POS	SSOP
8050	Baxter-Lowe, Lee	POS	NEG	POS	POS	A*001/ *005	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006/ *007	POS	POS	*003	SSP
8025	Carrington&Marti	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	*003/ *005/ *006	SSP
785	Chan, Soh Ha	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	RT-PCR
3224	Chen, Dong-Feng	NT																SSP, SSOP
124	Christiansen&Wit	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	DEL	POS	NT	NT	MULTIPLEX SSP
3632	Colombe, Beth	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
189	Crowe, Deborah	POS	NEG	POS	POS	A*001/ *005	POS	POS	POS	POS	POS	NEG	NEG	*003-*007	POS	POS	*003	SSP
8030	Davidson&Poultio	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
8031	Dinauer, David	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003-*007	POS	POS	*003	SSP
3186	Dunckley, Heath	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
4251	Ellis, Thomas	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	*003	SSP
8051	Endres, Robert	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006/ *007	POS	POS	*003	SSP
2549	Fagoaga, Omar	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003-*007	POS	POS	*003	SSP
8038	Fernandez-Vina&	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	*003/ *006/ *007 *009	POS	POS	POS	SSOP
762	Fischer&Mayr	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003-*007	POS	POS	*003	SSP
8036	Gillespie, Kathleen	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
8040	Gladman/Pellett/P	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
234	Gomez, Carmen	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
4985	Graff, Ralph J.	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003-*007	POS	POS	*003	SSP
8041	Han, Hoon	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006	POS	POS	*00301/ *00302	SSP
1461	Hidajat, M.	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	*003	SSP
5000	Hsu, Susan H.	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP, SSP
2344	Hurley&Hartzman	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP, SSOP
4337	Kim, Tai-Gyu	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
836	KuKuruga, Debor	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
8046	Kusnierczyk, Piot	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	NT	NT	MULTIPLEX SSP, SSP
8061	Lanzer, G.	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
1108	Linke, Robert	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	*00103, *003/ *004/ *006-*009	POS	POS	POS	SSOP
8067	Marino, Susan R.	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	POS	SSP, SSOP

**Table 4. KIR Exchange Sample: KDNA #87 (Unknown)**

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5142	Marsh, Steven	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006/ *007/ *009	POS	POS	*003	SSP, SBT
733	Mytilineos, Joanni	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
8039	Noreen, Harriet	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
8022	Olerup, Olle	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
3966	Permpikul&Vejba	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
16	Pidwell/Askar	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP, SSP
3753	Reed&Rajalingam	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
8064	Roberts, Chrissy	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006/ *009	POS	POS	*003	WGA-SSP
8060	Rost&Klein	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
1694	Sauer&Gottwald	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
3410	Schroeder, M.L.	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006	POS	POS	*003	SSP
1426	Senitzer, David	POS	NEG	POS	POS	A*001	NEG	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	POS	MULTIPLEX SSP
769	Tavoularis, Sofia	POS	NEG	POS	POS	A*001	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	*003/ *005/ *006	SSOP, SSP
230	Thoni, Deborah	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
747	Tiercy, Jean-Marie	POS	NEG	POS	POS	A*001/ *005	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006/ *007	POS	POS	*00301/ *00302	SSP
5451	Tilanus, Marcel	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
4021	Trachtenberg, Eliz	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	MALDI-TOF
8024	Trowsdale, John	POS	NEG	POS	NT	POS	POS	NT	NT	POS	POS	NEG	NEG	DEL	POS	POS	*003	SSP
5462	Turner, E.V.	POS	NEG	POS	POS	A	POS	POS	POS	POS	*002- *004	NEG	NEG	NEG	POS	POS	POS	SSP
8053	Tyan, Dolly	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003- *007	POS	POS	*003	SSP
8028	Uhrberg, Markus	POS	NEG	POS	NT	POS	POS	POS	NT	POS	POS	NEG	NEG	POS	POS	NT	NT	SSP
3775	Vidan-Jeras, Blan	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
8023	Vilches, Carlos	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	DEL	POS	POS	DEL	SSP
8047	Wassmuth, Ralf	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSP
705	Watkins, David I.	POS	NEG	POS	POS	A*001/ *005	POS	POS	POS	POS	POS	NEG	NEG	*003/ *004/ *006/ *007	POS	POS	*003	SSP
1466	Yu, Neng	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	POS	SSOP
5282	Yu_Neng/UMMHC	POS	NEG	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	*003	SSP
713	Zachary, Andrea	POS	NEG	POS	POS	A	POS	POS	POS	POS	POS	NEG	NEG	*003- *007	POS	POS	*003	SSP

**Table 5. KIR Exchange Sample: KDNA #88 (Unknown)**

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5488	Adams, Sharon	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8033	Balazs, Ivan	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
8050	Baxter-Lowe, Lee	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8025	Carrington&Marti	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003/ *005/ *006	SSP
785	Chan, Soh Ha	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	RT-PCR
3224	Chen, Dong-Feng	NT																SSOP, SSP
124	Christiansen&Wit	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	NT	NT	MULTIPLEX SSP
3632	Colombe, Beth	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
189	Crowe, Deborah	POS	NEG	POS	POS	A*001/ *003	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8030	Davidson&Poulto	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	POS	POS	POS	SSOP
8031	Dinauer, David	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
3186	Dunckley, Heathe	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NT	POS	POS	POS	SSP
4251	Ellis, Thomas	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8051	Endres, Robert	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
2549	Fagoaga, Omar	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8038	Fernandez-Vina&	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
762	Fischer&Mayr	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8036	Gillespie, Kathleen	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
8040	Gladman/Pellett/P	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
234	Gomez, Carmen	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
4985	Graff, Ralph J.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8041	Han, Hoon	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*00301/ *00302	SSP
1461	Hidajat, M.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
5000	Hsu, Susan H.	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP, SSP
2344	Hurley&Hartzman	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP, SSOP
4337	Kim, Tai-Gyu	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
836	KuKuruga, Debor	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
8046	Kusnierczyk, Piot	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	NT	NT	MULTIPLEX SSP, SSP
8061	Lanzer, G.	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
1108	Linke, Robert	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
8067	Marino, Susan R.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP, SSP
5142	Marsh, Steven	POS	NEG	POS	POS	POS	NEG	POS	POS	*01301	POS	NEG	POS	NEG	POS	POS	*003	SSP, SBT
733	Mytilineos, Joanni	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
8039	Noreen, Harriet	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
8022	Olerup, Olle	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
3966	Permpikul&Vejba	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
16	Pidwell/Askar	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP, SSP
3753	Reed&Rajalingam	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP

**Table 5. KIR Exchange Sample: KDNA #88 (Unknown)**

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
8064	Roberts,Chrissy	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	WGA-SSP
8060	Rost&Klein	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
1694	Sauer&Gottwald	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
3410	Schroeder,M.L.	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
1426	Senitzer,David	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	MULTIPLEX SSP
769	Tavoularis,Sofia	POS	NEG	POS	POS	A*001/ *005, B*002/ *009/ *010	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003/ *005/ *006	SSOP,SSP
230	Thoni,Deborah	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
747	Tiercy,Jean-Marie	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*00301/ *00302	SSP
5451	Tilanus,Marcel	POS	NT	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
4021	Trachtenberg,Eliz	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	MALDI-TOF
8024	Trowsdale,John	POS	NEG	POS	NT	POS	NEG	NT	NT	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
5462	Turner,E.V.	POS	NEG	POS	POS	A, B	NEG	POS	POS	POS	*002- *004	NEG	POS	NEG	POS	POS	POS	SSP
8053	Tyan,Dolly	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
8028	Uhrberg,Markus	POS	NEG	POS	NT	POS	NEG	POS	NT	POS	POS	NEG	POS	NEG	POS	NT	NT	SSP
3775	Vidan-Jeras,Blan	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
8023	Vilches,Carlos	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	DEL	SSP
8047	Wassmuth,Ralf	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSP
705	Watkins,David I.	POS	NEG	POS	POS	A*001/ *005	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
1466	Yu,Neng	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	POS	SSOP
5282	Yu_Neng/UMMHC	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP
713	Zachary,Andrea	POS	NEG	POS	POS	A	NEG	POS	POS	POS	POS	NEG	POS	NEG	POS	POS	*003	SSP

**PARTICIPATING CENTERS**

Name			City/State	Country	Name			City/State	Country
Adams	Sharon		Bethesda MD		Lee	Jar-How	Dr	Canoga Park CA	
Baxter-Lowe	Lee Ann	Dr	San Francisco CA		Linke	Robert	PhD	Stamford CT	
Carrington/Martin		Drs	Frederick MD		Marino	Susana R		Chicago IL	
Chan	Soh Ha	Prof	Singapore	Singapore	Marsh	Steven	Dr	London	England
Charlton	Ronald	PhD	Jacksonville FL		Mytilineos	Joannis	MD	Ulm	Germany
Chen	Dongfeng	Dr	Durham NC		Noreen	Harriet		Minneapolis MN	
Christiansen/Witt			Perth	Australia	Olerup	Olle		Saltsjobaden	Sweden
Colombe	Beth	PhD	Philadelphia PA		Permpikul/Vejbaesya		Drs	Bangkok	Thailand
Costeas	Paul A.	Dr	Nicosia	Cyprus	Pidwell/Askar			Cleveland OH	
Crowe	Deborah	PhD	Nashville TN		Ray/Balazs			Stamford CT	
Davidson/Poulton		Drs	Manchester	England	Reed/Rajalingam		Drs	Los Angeles CA	
Dinauer	David		Brown Deer WI		Roberts	Chrissy H.		London	England
Dunckley	Heather	PhD	Sydney NSW	Australia	Rost/Klein		Drs	Martinsried	Germany
Ellis	Thomas	PhD	Milwaukee WI		Sauer/Gottwald	Norbert		Lich	Germany
Endres	Robert	Drs	Tempe AZ		Schroeder	M.L.	MD	Winnipeg MB	Canada
Fagoaga	Omar	Dr	Detroit MI		Senitzer	David	PhD	Duarte CA	
Fernandez-Vina/Cano		Drs	Houston TX		Tavoularis	Sofia	Dr	Ottawa ON	Canada
Fischer/Mayr		Drs	Vienna	Austria	Thoni	Deborah	MD	Orlando FL	
Gardiner	Clair	PhD	Dublin	Ireland	Tiercy	Jean-Marie	Dr	Geneva	Switzerland
Gillespie	Kathleen	Dr	Bristol	UK	Tilanus	Marcel	Dr	Maastricht	Germany
Gladman/Pellett/Pollack			Toronto ON	Canada	Trachtenberg	Elizabeth	PhD	Oakland CA	
Gomez	Carmen		Miami FL		Trowsdale	John	Prof	Cambridge	UK
Graff	Ralph J.	Dr	St Louis MO		Turner	E.V.	PhD	Memphis TN	
Han	Hoon	Dr	Seoul	S. Korea	Tyan	Dolly	Dr	Palo Alto	
Hidajat	Melanny		Brugge	Belgium	Uhrberg	Markus	Dr	Dusseldorf	Germany
Holdsworth	Rhonda		South Melbourne	Australia	Vidan-Jeras	Blanka		Ljubljana	Slovenia
Hsu	Susan H.	PhD	Philadelphia PA		Vilches	Carlos	Dr	Madrid	Spain
Hurley/Hartzman		Drs	Rockville MD		Wassmuth	Ralf	Prof	Dresden	Germany
Kim	Tai-Gyu	Prof	Seoul	S. Korea	Watkins	David	PhD	Madison WI	
Kotsch	Katja	PhD	Berlin	Germany	Yu	Neng	MD	Dedham MA	
KuKuruga	Debra	PhD	Baltimore MD		Yu	Neng	MD	Worcester MA	
Kusnierczyk	Piotr		Wroclaw	Poland	Zachary	Andrea	PhD	Baltimore MD	
Lanzer	G.	Prof	Graz	Austria					