REPORT OF THE 12TH UCLA INTERNATIONAL KIR EXCHANGE

MAY 9, 2007

KIR 45-48

Dear Colleagues:

This is the first UCLA International KIR Exchange report for samples typed in year 2007. We have now completed 12 KIR exchange studies since the program was initiated in 2004.

For the 12th KIR Exchange, 4 DNA samples (KDNA#45-48) were shipped to each laboratory on February 7, 2007. Fifty-three laboratories submitted their KIR typing results. The majority of the laboratories used commercial or "in house" developed sequence-specific primer (SSP) based PCR typing systems, and the remaining laboratories used either a sequence-specific oligonucleotide probe (SSOP) method, or a multiplexed SSP method, or the combination of these methods. The majority of the laboratories performed subtyping for 2DL5, 2DS4, and 3DP1.

The results for the 12th KIR Exchange are summarized in Table 1 and individual laboratory results reported for each DNA sample are provided in Tables 2-5. Laboratories reported discrepant results for the presence or absence of KIR2DL1, 2DL2, 2DL3, 3DL1, 3DS1, 2DS1, 2DS2, 2DS4, and 2DP1 genes. Discrepant results from the consensus typing are italicized in the listing of results (Tables 2-5), 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.

Regarding sample KDNA#44 from the previous KIR#11 Exchange study, the following comments were received from Witt and Christiansen, "As we have suggested, the KIR2DS4 probe pattern was not consistent with known alleles for KIR2DS4" and from Vilches, "We have also studied further cell #44 of the previous exchange, for which we reported a conflicting negative result for 2DS4. This cell also has a novel 2DS4 sequence, which was the origin of our discrepancy."

We thank you for your active participation in this program.

Best regards,

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KIR Exchange Sample: KDNA # 0045:

The DNA was isolated from an Asian donor. The consensus KIR type is: 2DL1-2DL2-2DL4-2DL5-3DL1-3DL2-3DL3-3DS1-2DS1-2DS2-2DS3-2DS4-2DS5-2DP1-3DP1. Thirty participating laboratories (57%) reported this DNA carrying KIR2DS4 gene whereas the remaining laboratories (43%) reported that this samples was 2DS4-negative. Five laboratories (Chen, Hsu, Marsh, Noreen, Yu) found a novel 2DS4 sequence. Yu reported that this new sequence was closely related to 2DS4*003 in the tested regions of exons 3-5, with two amino acid substitutions at codon 52 (ATT>ACT, Ile>Thr) and codon 129 (AGC>AGA, Ser>Arg).

Six laboratories could not confirm the presence of 3DL1 gene in this sample. Vilches and Kusnierczyk observed discrepant results for KIR3DL1 using different typing methods, and therefore, suggested that a new 3DL1 allele was present. Trachtenberg, using a MALDI-TOF/SNP assay, and our laboratory, by direct sequencing, also confirmed the presence of a novel 3DL1 sequence. This novel allele differs from 3DL1*007 at codon 88 (CCC>GCC, Pro>Ala) (D0 domain) and at codon 166 (CTT>TTT, Leu>Phe) (D1 domain).

Therefore, the discrepancies observed with 2DS4 and 3DL1 typing of this sample could be due to the typing reagents targeted to these novel mutations.

Furthermore, Yu and Chen commented that a novel 2DL4 allele was detected. Yu reported that the new sequence was very similar to 2DL4*006 in the tested regions of exons 3-5 and exons 7-9, with two amino acid substitutions, at codon 109 (CCG>CAG, Pro>Gln) and at codon 112 (ACG>ATG, Thr>Met).

Two laboratories reported this sample as negative for 2DL2 and one laboratory reported it as positive for 2DL3 gene.

KIR Exchange Sample: KDNA # 0046:

KDNA#46 was obtained from a Caucasian individual. The consensus KIR type is: 2DL2-2DL4-2DL5-3DL1-3DL2-3DL3-2DS1-2DS2-2DS3-3DP1. This genotype occurs infrequently in Caucasians (0.4-2.7%) (1,2,3). Two laboratories reported that this DNA carried 2DP1 gene. Three laboratories reported this DNA as either negative for 2DL2, or positive for 2DL1, or positive for 2DL3.

KIR Exchange Sample: KDNA # 0047:

KDNA#43 was derived from an African American donor. The consensus KIR type is: 2DL1-2DL2-2DL3-2DL4-2DL5-3DL1-3DL2-3DL3-2DS2-2DS3-2DS4-2DP1-3DP1. This is the second most common KIR genotype found in African populations (1,4). Two laboratories reported this DNA as negative for 2DL2 and another two laboratories reported it as negative for 2DS1. One laboratory typed this DNA as positive for 3DS1 and another typed as negative for 2DS2.

KIR Exchange Sample: KDNA # 0048:

The ethnic origin of this DNA donor is Hispanic. The consensus KIR type is: 2DL1-2DL2-2DL3-2DL4-2DL5-3DL1-3DL2-3DL3-3DS1-2DS1-2DS2-2DS3-2DS4-2DS5-2DP1-3DP1. This genotype carries all known KIR genes and occurs in all populations (1, 4). One laboratory reported this DNA as negative for 2DL2 and another laboratory reported it as negative for 3DS1.

References

- 1. Du, Z., Gjertson, D. W., Reed, E. F., and Rajalingam, R. (2007). Receptor-ligand analyses define minimal killer cell Ig-like receptor (KIR) in humans. Immunogenetics *59*, 1-15.
- 2. Niokou, D., Spyropoulou-Vlachou, M., Darlamitsou, A., and Stavropoulos-Giokas, C. (2003). Distribution of killer cell immunoglobulin-like receptors in the Greek population. Hum Immunol *64*, 1167-1176.
- 3. Toneva, M., Lepage, V., Lafay, G., Dulphy, N., Busson, M., Lester, S., Vu-Trien, A., Michaylova, A., Naumova, E., McCluskey, J., and Charron, D. (2001). Genomic diversity of natural killer cell receptor genes in three populations. Tissue Antigens *57*, 358-362.
- 4. Yawata, M., Yawata, N., Abi-Rached, L., and Parham, P. (2002). Variation within the human killer cell immunoglobulin-like receptor (KIR) gene family. Crit Rev Immunol *22*, 463-482.

		Summ	ary of the	12th K	IR Ex	change (k	(DNA#45-48	3)										
KIR Ex.	DNA	# reporting labs	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1
	#0045	53	POS *00401 [1] *0040101/ *0040102 [1] *004/*006 [1] *00303/ *00401/ *005/ *006 [1]	POS *001-*003/ *005 [2] NEG [2]	NEG POS [1]	*new [3]	POS B [15] B*002/*004/*007 [3] B*002-*004 [2] B*002, *006 [1] B*002/*004 [1] B*002-*004/*006/ *007 [1]		POS *002*007 or *010,*015 [1] *001/*009/ *013,*007 or *006/*014, *010/*016 [1]	POS NT [1]	POS	POS *002-*004 [2]	POS	POS *001 [1]	POS [15]/ NEG [23] *new [5] DEL [4] *003/*004/*006/ *007 [3] *003/*004/*006 [1] *003-*005 [1] *003-*007 [1]		POS NT [2]	POS *003 [23] *00301/*00302 [2] NT [2]
#12	#0046	53	NEG POS [1]	POS *001-*003/ *005 [2] NEG [1]		*00102 [1]	POS B [15] B*002/*004/*007 [3] B*002-*004 [2] B*002 [1] B*002 [1] B*002-*004/*006/ *007 [1]	POS *002, - [1] *002/ *006- *008/ *015/ *017/ *018/ *020, - [1] *001/ *002/ *005-*009/ *015 *018/ *020, *004/ *009 [1]	POS *002, *007 or *010, *015 [1] *001/ *009/ *013, *007 or *006, *014, *010/ *016 [1]	POS NT [1]	NEG	POS *002-*004 [2]	POS	POS *001 [1]	NEG		NEG NT [2] POS [2]	POS *001/*002/*004 [18] *001/*002 [2] *003 [1] *001-*004 [1] NT [2]
	#0047	53	POS *003,*004 [1] *004, *001-*003/ *006 [1]	POS *001-*003/ *005 [2] *003/*005 [1] NEG [2]		*006, *002/ *008 [1] *00201/ *00802, *006/ *010 [1]	POS B [16] B*002-*004 [2] B*002/*004/*007 [2] B*002/*004 [1] B*002-*004/*006/ *007 [1]	*004, *007 [1] *001/ *002/	POS *003, - [1] *003, *008 [1]		NEG POS [1]	NEG POS [2]	POS NEG [1]	POS *001 [1]	POS *003-*007 [1] *003-*006 [6] *003/*004/*006/ *007 [6] DEL [5] *003/*004/ 006 [2] *003/*004/ 006 [1] *003-*005 [1]	NEG	POS NT [2]	POS *003 [23] *00301/*00302 [2] NT [2]
	#0048	53	POS *002,*004 [1]	POS *001-*003/ *005 [2] NEG [1]	*002,	*00102, *005 [1] *00102 / *00103/ *00105, *00202/	POS A,B [11] A*001, B*002 [1] A, B*002/*004/*007 [1]	POS *002 [1] *009 [1] *009 (1) *002/*006- *008/*015/ *017/*018/ *020, - [1] *001/*002/ *005-*009/*015 *018/*020, *004/*009 [1]				POS *002-*004 [2]	POS	POS *001 [1]	POS *001/*002 [19] *001 [7] FULL [2] *001, - [1]		POS NT [2]	POS *003 [19] *00301/*00302 [2] NT [2]

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 typing

SBT - Sequencing-based typing

Table	e 2. KIR Exchang	je Sample	e: KDN/	\ #45														
	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	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
			*001- *003/											*003/ *004/ *006/				
8033	Balazs,Ivan	POS	*005	NEG	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	*007	POS	POS	POS	SSOP
8025	Carrington/Mar	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	DEL	POS	POS	*003	SSP
785	Chan,Soh Ha	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
5232	Charlton,Ronald	POS	NEG	POS	POS	B*002- *004	POS	POS	POS	NEG	POS	POS	POS	*003- *005	POS	POS	*003	SSP
	Chen, Dongfeng	POS	POS	NEG	*new	POS	POS	POS	POS	NEG	POS	POS	POS	*new	POS	POS	POS	SSOP,SSP
	Chongkolwatana,	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	SSP
	Christiansen/Witt	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSO
	Colombe,Beth	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
	Cook, Daniel J.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	RSSOP,SSP
5130	Costeas, Paul A	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
						B*002/ *004/												
	Crowe, Deborah	POS	POS	NEG	POS	*007	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
	Davidson/Poult	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	*001	POS	POS	POS	*003	SSOP
	Davis,Mary	POS	POS	NEG	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSOP
	Dunckley, Heather	POS	POS	NEG	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
	Fernandez-Vina,M	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	SSOP
	Fischer, Gottf	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
	Gardiner,Clair	POS	POS	NEG	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS *00301/	SSP
	Gillespie,Kath	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*00302	SSP
	Gladman/Pellet	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	SSP
4985	Graff,Ralph J.	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
0044		****	200	1.50	500		500	200			500	200	200	*003/ *004/	200		*00301/	
	Han,Hoon	*00401	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	*006	POS	POS	*00302	
	Hidajat,Melan	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
	Holdsworth/Tait	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
	Hsu,Susan H.	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	*new	POS	POS	POS	SSOP,SSP
	Kim,Tai-Gyu	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
8037	Kotsch,Katja	POS	POS	NEG	POS	POS B*002/	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
000	Kukuman Daha	DOC	DOG	NEC	DOC	*004/	DOC	DOC	DOG	NEC	DOC	DOG	DOG	NEC	DOC	DOC	*000	000
	KuKuruga,Debr	POS	POS	NEG	POS	*007	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
ชU46	Kusnierczyk,Piotr	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	DEL	POS	NT	NT	MULTIPLEX SSP

Table	e 2. KIR Exchan	ge Sample	: KDN/	445								1				1	1	
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
							*002/	*001/ *009/										
							*006-	*013,										
							*008/	*007//										
		*00303/					*015/	*006/										
		*00401/			*00202/		*017/	*014,										
		*005/*006.			*00801/		*018/	*010/										
5142	Marsh,Steven	-	POS	NEG	*009	POS	*020, -	*016	POS	NEG	POS	POS	POS	*new	POS	POS	POS	SSOP
	Middleton,Der	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSOP
	Mytilineos, Joan	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	POS	SSP
2549	Nehlsen-Canna	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
8039	Noreen, Harriet	POS	POS	NEG	*new	POS	POS	POS	POS	NEG	POS	POS	POS	*new	POS	POS	POS	
4141	Pollack,Maril	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
3753	Reed/Rajaling	POS	POS	NEG	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
						B*002/ *004/												
	Reinsmoen,Nan	POS	POS	NEG	POS	*007	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
	Sauer,Norbert	POS	NEG	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
3410	Schroeder,M.L.	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
1426	Senitzer,David	POS	POS	NEG	POS	POS	*017, -// *017, *015	POS	POS	NEG	POS	POS	POS	*003/ *004/ *006/ *007	POS	POS	*003	MULTIPLEX SSP
740	Snider, Denis	POS	POS	NEG	POS	B*002- *004	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
	Spannagl, Michae	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
	Thoni, Deborah	POS	POS	NEG	POS	POS	NEG	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSO
747	Tiercy,Jean-Marie	POS	POS	NEG	POS	B*002- *004/ *006/ *007	*001/ *002/ *005- *009/ *015- *018/ *020, *004/ *019	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
4021	Trachtenberg,Eliz	*0040101/ *0040102	*001- *003/ *005	NEG	POS	POS	*new	POS	POS	NEG	*002- *004	POS	POS	*003/ *004/ *006/ *007	POS	POS	POS	MALDI-TDF/SNP
8024	Trowsdale,Joh	POS	POS	NEG	NT	POS	POS	POS	POS	NEG	POS	POS	POS	DEL	POS	POS	POS	SSP
5462	Turner,Victor	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP
8028	Uhrberg,Marku	POS	POS	NEG	NT	POS	POS	POS	NT	NEG	POS	POS	POS	*003- *007	POS	NT	NT	SSP
	Vidan-Jeras,Bl	POS	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP

Tabl	e 2. KIR Exchan	ge Sample	: KDN	A #45														
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
0000	\ <i>I</i> ''	D00	D00	NEO	D00	B*002,	D00	D00	D00	NEO	D00	D00	D00	551	D00	D00	*000	000
8023	Vilches,Carlo	POS	POS	NEG	POS	*006	POS	POS	POS	NEG	POS	POS	POS	DEL	POS	POS	*003	SSP
8047	Wassmuth,Ralf	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	POS	POS	POS	SSP
								*002,										
								*007//										
								*010,			*002-							
1466	Yu,Neng	*004/ *006	POS	NEG	*new	POS	POS	*015	POS	NEG	*004	POS	POS	*new	POS	POS	*003	SSOP,SBT
						B*002/												
713	Zachary,Andre	POS	POS	NEG	POS	*004	POS	POS	POS	NEG	POS	POS	POS	NEG	POS	POS	*003	SSP

Tabl	e 3. KIR Exchan	ge Sam	ple: KD	NA #46	;													
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
																	*001/	
- 400	A -l Ol	NEO	DOO	NEO	D00		DO0	DO0	DO0	NEO	DOO	DOO	DOO	*001/	NEO	DOO	*002/	000
5488	Adams,Sharon	NEG	POS *001-	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	POS	*004	SSP
			*001-															
8033	Balazs,Ivan	NEG	*005	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	*001	NEG	NEG	POS	SSOP
0000	Daiazs,ivaii	IVEO	000	IVEO	100	100	100	100	100	INLO	1 00	1 00	1 00	001	IVLO	INLO	*001/	0001
																	*002/	
8025	Carrington/Mar	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*001	NEG	NEG	*004	SSP
785	Chan,Soh Ha	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
						B*002-								*001-				
	Charlton,Ronald	NEG	POS	NEG	POS	*004	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	POS	SSP
	Chen,Dongfeng	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSOP,SSP
	Chongkolwatana,	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
	Christiansen/Witt	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSO
	Colombe, Beth	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
16	Cook,Daniel J.	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS *001/	NEG	NEG	POS *001/	RSSOP,SSP
512O	Costeas,Paul A	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*001/	NEG	NEG	*001/	SSP
3130	Costeas, Faul A	INLG	F 03	INLO	F 03	B*002/	F 03	F03	F03	INLG	F 03	F03	F 03	002	INLG	INLG	*001/	33F
						*004/								*001/			*002/	
189	Crowe, Deborah	NEG	POS	NEG	POS	*007	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
																	*001/	
																	*002/	
8030	Davidson/Poult	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	*001	POS	NEG	NEG	*004	SSOP
1108	Davis,Mary	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSOP
	Dunckley,Heather	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
8038	Fernandez-Vina,M	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSOP
																	*001/	
700	Final an Oall	NEO	DOO	NEO	D00		DO0	DO0	DO0	NEO	DOO	DOO	DOO	*001/	NEO	NEO	*002/	000
	Fischer,Gottf Gardiner,Clair	NEG NEG	POS POS	NEG NEG	POS	B POS	POS	POS POS	POS	NEG NEG	POS	POS POS	POS	*002 *001	NEG NEG	NEG NEG	*004 *003	SSP
8026	Gardiner,Clair	NEG	PU5	NEG	PU5	PUS	PUS	PUS	PUS	NEG	PUS	PU5	PU5	-001	NEG	NEG	*001/	55P
														*001/			*002/	
8036	Gillespie,Kath	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
	Gladman/Pellet	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
																	*001/	
														*001/			*002/	
4985	Graff,Ralph J.	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
																	*001/	
														*001/			*002/	
8041	Han,Hoon	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP

CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
																	*001/	
														*001/			*002/	
1461	Hidajat,Melan	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
045		NEO	D00	NEO	D00	Б.	D00	D00	D00	NEO	D00	D00	D00	*001/	NEO	NEO	D00	000
	Holdsworth/Tait	NEG NEG	POS POS	NEG NEG	POS POS	B POS	POS POS	POS POS	POS POS	NEG NEG	POS POS	POS	POS POS	*002 POS	NEG NEG	NEG NEG	POS POS	SSP SSOP,SSP
	Hsu,Susan H. Kim,Tai-Gyu	POS	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	POS	POS	SSP
	Kotsch,Katja	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
0001	rtotoori,rtatja	1120	1 00	INEO	1 00	B*002/	1 00			INEO	. 00	1 00	100	1 00	IVEO	INEO	*001/	001
						*004/								*001/			*002/	
836	KuKuruga,Debr	NEG	POS	NEG	POS	*007	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
	Kusnierczyk,Piotr	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	FULL	NEG	NT	NT	MULTIPLEX SSP
								*001/										
							*002/	*009/										
							*006-	*013,										
							*008/	*007//										
					*00102/		*015/	*006/										
					*00103/		*017/	*014,										
E4.40	Mariah Charran	NEC	DOC	NEC	*00105,	DOC	*018/	*010/	DOC	NEC	DOC	DOC	DOC	*004	NEC	NEC	DOC	CCOD
	Marsh,Steven Middleton,Der	NEG NEG	POS POS	NEG NEG	POS	POS	*020, - POS	*016 POS	POS	NEG NEG	POS POS	POS	POS POS	*001, - *001	NEG NEG	NEG NEG	POS	SSOP SSOP
	Mytilineos, Joan	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
7 00	wytiiiricos,ooarr	INLO	1 00	INLO	100	100	1 00	1 00	100	INLO	1 00	100	100	100	IVEO	INLO	*001/	001
														*001/			*002/	
2549	Nehlsen-Canna	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
	Noreen, Harriet	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	000
	Pollack,Maril	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
3/53	Reed/Rajaling	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
						B*002/ *004/								*001/			*001/ *002/	
3702	Reinsmoen,Nan	NEG	POS	NEG	POS	*004/	POS	POS	POS	NEG	POS	POS	POS	*001/	NEG	NEG	*002/	SSP
	Sauer, Norbert	NEG	NEG	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
	2.2.2.,			5	. 55							. 55		*001/	0		. 55	
3410	Schroeder,M.L.	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	POS	SSP
																	*001/	
																	*002/	
1426	Senitzer,David	NEG	POS	NEG	POS	POS	*002, -	POS	POS	NEG	POS	POS	POS	*001	NEG	NEG	*004	MULTIPLEX SSP

Tabl	e 3. KIR Exchang	ge Sam	ple: KD	NA #46	<u> </u>													
Tubi	O OF THIS EXOREIT																	
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
						B*002-								*001/			*001/ *002/	
740	Snider,Denis	NEG	POS	NEG	POS	*004	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
	,	_												*001/			*001/	
	Spannagl,Michae	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*002	SSP
230	Thoni,Deborah	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSO
							*001/ *002/											
							*005-											
							*009/											
							*015-											
						B*002-	*018/										****	
						*004/ *006/	*020, *004/							*001/			*001/ *002/	
747	Tiercy,Jean-Marie	NEG	POS	NEG	POS	*007	*019	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		*001-															
			*003/								*002-							
	Trachtenberg,E	NEG NEG	*005	NEG	POS NT	POS POS	POS	POS	POS POS	NEG NEG	*004	POS	POS POS	POS	NEG NEG	NEG	POS	MALDI-TOF/SNP
8024	Trowsdale,Joh	NEG	POS	NEG	INI	PU5	PUS	POS	PUS	NEG	POS	POS	P05	*001/	NEG	NEG	POS *001-	SSP
5462	Turner, Victor	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP
	,	_												*001/				
	Uhrberg,Marku	NEG	POS	POS	NT	POS	POS	POS	NT	NEG	POS	POS	POS	*002	NEG	NT	NT	SSP
3775	Vidan-Jeras,Bl	NEG	POS	NEG	POS	В	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS *001/	SSP
																	*001/	
8023	Vilches,Carlo	NEG	POS	NEG	POS	B*002	POS	POS	POS	NEG	POS	POS	POS	*001	NEG	NEG	*004	SSP
8047	Wassmuth,Ralf	NEG	POS	NEG	POS	POS	POS	POS	POS	NEG	POS	POS	POS	POS	NEG	NEG	POS	SSP
								*002,										
								*007//			*000						*001/	
1466	Yu,Neng	NEG	POS	NEG	*00102	POS	POS	*010, *015	POS	NEG	*002- *004	POS	POS	*001	NEG	NEG	*002/ *004	SSOP,SBT
1700	1 4,140119	1420	1 00	1420	00102	100	100	010	100	IVLO	007	1 00	100	001	1420	1420	*001/	0001,001
						B*002/								*001/			*002/	
713	Zachary,Andre	NEG	POS	NEG	POS	*004	POS	POS	POS	NEG	POS	POS	POS	*002	NEG	NEG	*004	SSP

Table	e 4. KIR Exchanç	ge Sam	ple: KD	NA #47	,													
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	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*003- *007	NEG	POS	*003	SSP
	, , , , , , , , , , , , , , , , , , , ,													*003/				
			*001-											*004/				
			*003/											*006/				
8033	Balazs,Ivan	POS	*005	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*007	NEG	POS	POS	SSOP
	Carrington/Mar	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	DEL	NEG	POS	*003	SSP
	Chan,Soh Ha	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
	,					B*002-								*003-				
5232	Charlton,Ronald	POS	POS	POS	POS	*004	POS	POS	POS	NEG	NEG	POS	POS	*005	NEG	POS	*003	SSP
	Chen, Dongfeng	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP,SSP
3966	Chongkolwatana,	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
	Christiansen/Witt	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	RSSO
	Colombe,Beth	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
16	Cook, Daniel J.	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	RSSOP,SSP
5130	Costeas, Paul A	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*003	NEG	POS	*003	SSP
						B*002/ *004/								*003-				
189	Crowe, Deborah	POS	POS	POS	POS	*007	POS	POS	POS	NEG	NEG	POS	POS	*007	NEG	POS	*003	SSP
	Davidson/Poult	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	*001	POS	NEG	POS	*003	SSOP
	Davis,Mary	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP
	Dunckley, Heather	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
	Fernandez-Vina,M	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	NEG	POS	DEL	NEG	POS	POS	SSOP
	,													*003-				
762	Fischer,Gottf	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*006	NEG	POS	*003	SSP
8026	Gardiner,Clair	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
														*003-			*00301/	
8036	Gillespie,Kath	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*006	NEG	POS	*00301/	SSP
	Gladman/Pellet	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
0040	Cladifiati/i Clict	100	100	100	100		1 00	1 00	1 00	INLO	IVEO	1 00	100	*003-	IVEO	100	1 00	001
4985	Graff,Ralph J.	POS	POS	POS	POS	В	POS	POS	POS	NEG	POS	POS	POS	*007	NEG	POS	*003	SSP
	, ,													*003/			*******	
0044	Han Hann	DOC	DOC	DOC	DOC	DOC	DOC	DOC	DOC	NEC	NEC	DOC	DOC	*004/	NEC	DOC	*00301/	CCD
8041	Han,Hoon	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*006 *003-	NEG	POS	*00302	55P
1461	Hidajat,Melan	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*006	NEG	POS	*003	SSP
														*003-				
	Holdsworth/Tait	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*007	NEG	POS	*003	SSP
	Hsu,Susan H.	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSOP,SSP
	Kim,Tai-Gyu	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8037	Kotsch,Katja	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
836	KuKuruga,Debr	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*003- *007	NEG	POS	*003	SSP
	Kusnierczyk, Piotr	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	NEG	NT	NT	MULTIPLEX SSP

Table	e 4. KIR Exchan	ge Sam	ple: KD	NA #47	,			-										
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5142	Marsh,Steven	*003, *004	POS	*001, -	*00201/ *00802, *006/ *010	POS	POS	*003, -	POS	POS	NEG	POS	POS	*003/ *004/ *006/ *007	NEG	POS	POS	SSOP
8027	Middleton,Der	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*003- *007	NEG	POS	POS	SSOP
	Mytilineos, Joan	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
	,													*003-				
2549	Nehlsen-Canna	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	*006	NEG	POS	*003	SSP
8039	Noreen,Harriet	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	
4141	Pollack,Maril	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*003/ *004/ *006/ *007	NEG	POS	*003	SSP
	Reed/Rajaling	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
						B*002/ *004/								*003-				
	Reinsmoen,Nan	POS	POS	POS	POS	*007	POS	POS	POS	NEG	POS	POS	POS	*007	NEG	POS	*003	SSP
1694	Sauer,Norbert	POS	NEG	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
3410	Schroeder,M.L.	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*003- *006	NEG	POS	*003	SSP
4.400	0 " 0 "	000	D00	DO0	D00	D00	*004,	D00	D00	NEO	1150	D00	DO 0	*003/ *004/ *006/	NEO	DO0	*000	MULTIPLEY OOD
	Senitzer,David	POS	POS	POS	POS	POS B*002-	*007	POS	POS	NEG	NEG	POS	POS	*007 *003/ *004/	NEG	POS	*003	MULTIPLEX SSP
	Snider,Denis Spannagl,Michae	POS POS	POS POS	POS POS	POS POS	*004 B	POS POS	POS POS	POS POS	NEG NEG	NEG NEG	POS POS	POS	*006 *003	NEG NEG	POS POS	*003 *003	SSP SSP
	Thoni,Deborah	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSO
	<i>.</i>					B*002- *004/ *006/	*001/ *002/ *005- *009/ *015- *018/							*003/ *004/ *006/				
	Tiercy,Jean-Marie Trachtenberg,E	POS	*001- *003/ *005	POS	POS	*007	*020 POS	POS	POS	NEG NEG	NEG NEG	POS	POS	*007 *003/ *004/ *006/ *007	NEG NEG	POS		SSP MALDI-TOF/SNP

Tabl	e 4. KIR Exchang	ge Sam	ple: KD	NA #47	,													
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
8024	Trowsdale,Joh	POS	POS	POS	NT	POS	POS	POS	POS	NEG	NEG	POS	POS	DEL	NEG	POS	POS	SSP
5462	Turner,Victor	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	*003- *006	NEG	POS	*003	SSP
8028	Uhrberg,Marku	POS	POS	POS	NT	POS	POS	POS	NT	NEG	NEG	POS	POS	*003- *007	NEG	NT	NT	SSP
3775	Vidan-Jeras,Bl	POS	POS	POS	POS	В	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
8023	Vilches, Carlo	POS	POS	POS	POS	B*002	POS	POS	POS	NEG	NEG	POS	POS	DEL	NEG	POS	*003	SSP
8047	Wassmuth,Ralf	POS	POS	POS	POS	POS	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	POS	SSP
1466	Yu.Neng	*004, *001- *003/ *006	*003/ *005	POS	*006, *002/ *008	POS	POS	*003, *008	POS	NEG	NEG	POS	POS	*004, *006	NEG	POS	*003	SSOP.SBT
713	Zachary,Andre	POS	POS	POS	POS	B*002/ *004	POS	POS	POS	NEG	NEG	POS	POS	POS	NEG	POS	*003	SSP

Table	e 5. KIR Exchan	ge Sam	ple: KD	NA #48	}													
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
5 400	A	000	D00	D00	500	4.5	D00	D00	D00	D00	D00	D00	D00	*001/	D00	D00	*000	000
5488	Adams,Sharon	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
			*001-															
0000	D	D00	*003/	500	B00	D00	D00	D00	D00	D00	D00	B00	D00	*004	D00	D00	D00	0000
	Balazs,Ivan	POS	*005	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*001	POS	POS	POS	SSOP
	Carrington/Mar	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*001	POS	POS	*003	SSP
785	Chan,Soh Ha	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
	0, 1, 5, 1,	500	200	200	500	500	****	500	500	1150	200	500	500	*001/	200	500	+000	200
	Charlton,Ronald	POS	POS	POS	POS	POS	*009	POS	POS	NEG	POS	POS	POS	*002	POS	POS	*003	SSP
	Chen, Dongfeng	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSOP,SSP
	Chongkolwatana,	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
	Christiansen/Witt	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSO
	Colombe,Beth	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
16	Cook,Daniel J.	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	RSSOP,SSP
														*001/				
5130	Costeas,Paul A	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
														*001/				
189	Crowe, Deborah	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
8030	Davidson/Poult	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*001	POS	POS	POS	*003	SSOP
	Davis,Mary	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSOP
3186	Dunckley, Heather	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
8038	Fernandez-Vina,M	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSOP

														*001/				
	Fischer,Gottf	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
8026	Gardiner,Clair	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*001	POS	POS	POS	SSP
														*004/			*00004/	
0000	Ollis and a Karth	POS	DO0	POS	DO0	DO0	DOO	POS	DO0	DO0	DO0	DO0	DO0	*001/	DOO	DO0	*00301/	
	Gillespie,Kath		POS POS		POS POS	POS	POS POS		POS	POS	POS	POS	POS	*002	POS POS	POS	*00302	
8040	Gladman/Pellet	POS	P05	POS	P05	POS	P05	POS	P05	POS	POS	SSP						
4005	0 " 0	D00	D00	D00	D00	4.5	DO0	D00	D00	D00	D00	D00	D00	*001/	D00	D00	*000	000
4985	Graff,Ralph J.	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
														*004/			********	
0044	Han Hann	DOO	DCC	DCC.	DOO	DOG	DOG	DOG	DOG	DOG	DOO	DCC.	DOG	*001/	DOG	DOG	*00301/	000
8041	Han,Hoon	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*00302	22L
														*001/				
1461	Hidajat,Melan	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
														*001/				
	Holdsworth/Tait	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
	Hsu,Susan H.	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS		SSOP,SSP
	Kim,Tai-Gyu	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
8037	Kotsch,Katja	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP

Table	e 5. KIR Exchang	ge Sam	ple: KD	NA #48	3													
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
						A, B*002/ *004/								*001/				
836	KuKuruga,Debr	POS	POS	POS	POS	*007	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
	Kusnierczyk,Piotr	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	FULL	POS	NT	NT	MULTIPLEX SSP
					*00102/ *00103/ *00105, *00202/		*002/ *006- *008/ *015/ *017/	*001/ *009/ *013, *007// *006/ *014,										
E4.40	Marsh,Steven	*002, *004	POS	*002,	*00801/ *009	POS	*018/ *020, -	*010/ *016	POS	POS	POS	POS	POS	*001	POS	POS	POS	SSOP
	Middleton,Der	POS	POS	*006, - POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*001, - *001	POS	POS	POS	SSOP
	Mytilineos, Joan	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
700	Wytim 1000,00ari	1 00	1 00	100	1 00	1 00	1 00	100	1 00	1 00	. 00	1 00	1 00	*001/		1 00	100	001
2549	Nehlsen-Canna	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
8039	Noreen,Harriet	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	
														*001/				
	Pollack,Maril	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	POS	SSP
3753	Reed/Rajaling	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
2700	Dainamaan Nan	POS	POS	POS	DOC	A D	DOS	POS	POS	DOG	DOC	DOC	POS	*001/ *002	DOG	DOS	POS	CCD
	Reinsmoen,Nan Sauer,Norbert	POS	NEG	POS	POS POS	A,B POS	POS POS	POS	POS	POS POS	POS POS	POS POS	POS	POS	POS POS	POS POS	POS	SSP
1004	Odder, Norbert	100	IVEO	100	1 00	1 00	100	100	100	100	1 00	1 00	100	*001/	1 00	1 00	100	001
3410	Schroeder,M.L.	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
	Senitzer,David	POS	POS	POS	POS	POS	*002	POS	POS	POS	POS	POS	POS	*001	POS	POS	*003	MULTIPLEX SSP
740	Snider,Denis	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	*001/ *002	POS	POS	*003	SSP
	Spannagl,Michae	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*001/ *002	POS	POS		SSP
230	Thoni,Deborah	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSO

Table 5. KIR Exchange Sample: KDNA #48																		
CTR	Investigator Name	2DL1	2DL2	2DL3	2DL4	2DL5	3DL1	3DL2	3DL3	3DS1	2DS1	2DS2	2DS3	2DS4	2DS5	2DP1	3DP1	METHOD
							*001/											
							*002/ *005-											
							*009/											
							*015-											
							*018/											
							*020,											
747	Tiercy,Jean-Marie	POS	POS	POS	POS	POS	*004/ *019	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
	riordy, dearr marie	. 00	*001-	1 00		1 00	0.10	. 00	1 00	1 00		. 00	1 00	1 00	. 00	. 00		00.
			*003/								*002-							
4021	Trachtenberg,E	POS	*005	POS	POS	POS	POS	POS	POS	POS	*004	POS	POS	POS	POS	POS	POS	MALDI-TOF/SNP
8024	Trowsdale,Joh	POS	POS	POS	NT	POS	POS	POS	POS	POS	POS	POS	POS	FULL	POS	POS	POS	SSP
														*001/				
5462	Turner,Victor	POS	POS	POS	POS	A,B	POS	POS	POS	POS	POS	POS	POS	*002	POS	POS	*003	SSP
0000		D00	D00	500	NIT	500	500	D00	NIT	500	B00	B00	500	*001/	D00	N.	NIT	000
	Uhrberg,Marku Vidan-Jeras,Bl	POS	POS POS	POS POS	NT POS	POS	POS	POS	NT POS	POS POS	POS POS	POS POS	POS	*002 POS	POS	NT POS	NT POS	SSP SSP
3113	Vidaii-Jeias,Di	1 00	1 00	1 00	100	A*001,	100	1 03	1 00	1 03	103	103	1 00	1 00	1 03	1 00	100	331
8023	Vilches,Carlo	POS	POS	POS	POS	B*002	POS	POS	POS	POS	POS	POS	POS	*001	POS	POS	*003	SSP
8047	Wassmuth,Ralf	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	POS	SSP
	·							*002,										
								*007//										
4.400	V. N. a.	DOO	DOG	DOG	*00102,	DOG	BOO	*010,	DOG	DOG	*002-	DOG	D00	*004	DOG	DOG	*000	COOD ODT
	Yu,Neng Zachary,Andre	POS	POS	POS	*005 POS	POS A,B	POS	*015 POS	POS	POS	*004 POS	POS POS	POS	*001 POS	POS	POS		SSOP,SBT SSP
113	Zacriary,Andre	FU3	FU3	FU3	FU3	A,D	FU3	FU3	FU3	FU3	FU3	FU3	FU3	FU3	FU3	FU3	FU3	SSF

PARTICIPATING CENTERS											
Name			City/State	Country	Name			City/State	Country		
Adams	Sharon		Bethesda MD		MacCann	Eileen		Providence RI			
Balazs	Ivan		Stamford CT		Mah	Helen		Boston MA			
Carrington/Martin		Drs	Frederick MD		Marsh	Steven	Dr	London	England		
Chan	Soh Ha	Prof	Singapore	Singapore	McCluskey	James	Prof	Adelaide	Australia		
Charlton	Ronald	PhD	Jacksonville FL		Middleton	Derek	Prof	Belfast	N. Ireland		
Chen	Dongfeng	Dr	Durham NC		Mytilineos	Joannis	MD	Ulm	Germany		
Chongkolwatana/Vejbaesya		Drs	Bangkok	Thailand	Nehlsen-Cannarella	Sandra	Dr	Detroit MI			
Christiansen/Witt			Perth Aust	Australia	Noreen	Harriet		Minneapolis MN			
Colombe	Beth	PhD	Philadelphia PA		Olerup	Olle		Saltsjobaden	Sweden		
Cook	Daniel J.	PhD	Cleveland OH		Pollack	Marilyn	PhD	San Antonio TX			
Costeas	Paul A.	Dr	Nicosia	Cyprus	Reed/Rajalingam		Drs	Los Angeles CA			
Crowe	Deborah	PhD	Nashville TN		Reinsmoen	Nancy	PhD	Los Angeles CA			
Davidson/Poulton		Drs	Manchester	England	Satake	Masahiro	MD	Tokyo	Japan		
Davis	Mary	PhD	Stamford CT		Sauer	Norbert		Lich	Germany		
Dinauer	David		Brown Deer WI		Schroeder	M.L.	MD	Winnipeg MB	Canada		
Dunckley	Heather	PhD	Sydney NSW	Australia	Senitzer	David	PhD	Duarte CA			
Fernandez-Vina	Marcelo	PhD	Houston TX		Snider	Denis	PhD	Buffalo NY			
Fischer	Gottfried	Dr	Vienna	Austria	Spannagl	Michael	Dr	Munich	Germany		
Gardiner	Clair	PhD	Dublin	Ireland	Stavropoulos-Giokas	Catherine	Dr	Athens	Greece		
Gillespie	Kathleen	Dr	Bristol	UK	Thoni	Deborah	MD	Orlando FL			
Gladman/Pellett			Toronto ON	Canada	Tiercy	Jean-Marie	Dr	Geneva	Switzerland		
Graff	Ralph J.	Dr	St Louis MO		Trachtenberg	Elizabeth	PhD	Oakland CA			
Han	Hoon	Dr	Seoul	S. Korea	Trowsdale	John	Prof	Cambridge	UK		
Hidajat	Melanny		Brugge	Belgium	Turner	E.V.	PhD	Memphis TN			
Holdsworth/Tait			South Melbourne	Australia	Uhrberg	Markus	Dr	Dusseldorf	Germany		
Hsu	Susan H.	PhD	Philadelphia PA		Vidan-Jeras	Blanka		Ljubljana	Slovenia		
Kim	Tai-Gyu	Prof	Seoul	S. Korea	Vilches	Carlos	Dr	Madrid	Spain		
Kotsch	Katja	PhD	Berlin	Germany	Wassmuth	Ralf	Prof	Dresden	Germany		
KuKuruga	Debra	PhD	Baltimore MD		Watkins	David	PhD	Madison WI			
Kusnierczyk	Piotr		Wroclaw	Poland	Yu	Neng	MD	Dedham MA			
Loewenthal	Ron	MD PhD	Tel-Hashomer	Isreal	Zachary	Andrea	PhD	Baltimore MD			