

SCHEME 4A2 – CLASS I & II DNA HLA TYPING TO 2ND FIELD RESOLUTION

METHODOLOGY

SAMPLES 4A2 01-05/2014 DESPATCHED ON 18TH FEBRUARY 2014

Lab No.	Date received	Date tested	Method used HLA-A	HLA-B	HLA-C	DRB1	DRB3,4,5	DQA1	DQB1	DPA1	DPB1	IMGT/HLA allele database release used	Source of Primers and Probes			Kit manufacturer	Detection method	Comments
													Commercial Kits	Own Design	Other			
9	19-Feb	various	SSP/SBT	SSP/SBT	SSP/SBT	SSP/SBT	SSP		SSP/SBT		SBT		Yes	Yes	Invitrogen	Gel		
11		03-Mar									SSP		Yes	Yes		Gel		
12	19-Feb	05-Mar	SBT	SBT	SBT	SBT					SBT	3.14.0 Oct 2013/3.15.0 Jan 2014	Yes	Yes	Life Technologies	Gel	4A2 04/2014: ambiguous combination of HLA-B*27:05 & *44:27	
15	19-Feb	27-Feb	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM		SSP	SSP/LUM	SSP	SSP/LUM	3.13.1.0	Yes	Yes	LifeCodes HLA SSO (LUM), Olerup (SSP), Own design (SBT)	Gel/Fluorescence		
19	20-Feb	26-Feb	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM		SSP/LUM		SSP/LUM	3.13	Yes	Yes	GenProbe (LUM), In-house (SBT)	Fluorescence		
20	20-Feb	25-Feb	SSP/SBT	SSP/SBT	SSP/SBT	SSP/SBT	SSP		SSP/SBT		SSP/SBT	3.13	Yes	Yes		Fluorescence		
23	20-Feb	20-Feb									LUM		Yes	Yes	One Lambda (LUM), Lift Technologies (SSP)	Gel/Fluorescence		
24	20-Feb	04-Mar	SSP/SBT/LUM	SSP/SBT/LUM	SBT/LUM	SSP/LUM	LUM		SSP/LUM		SSP/LUM		Yes	Yes	Immucor, Olerup, GenDx	Gel/Fluorescence		
25	20-Feb	25-Feb	SSOP/SBT/Serology	SSOP/SBT/Serology	SSOP/SBT/Serology	SSOP/SBT/Serology						3.15.0 Jan 2014	Yes	Yes	GenProbe (LUM/SSOP), Life Technologies (SBT)	Gel/Fluorescence		
26	19-Feb	17-Mar	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM					SBT/LUM		Yes	Yes	VH Bio (SSO)	Fluorescence		
28	19-Feb	25-Feb - 05-Mar										3.11 and 3.13.1 3.15 Jul 2014	Yes	Yes	Life Technologies, One Lambda	Gel/Fluorescence		
29	19-Feb	20-Feb - 04-Mar	SSP/SSOP	SSP/SSOP	SSP	SSP/SSOP			SSP		SSP/LUM		Yes	Yes	BAG (SSO), Olerup (SSP)	Gel/Reverse Dot Blot		
34	19-Feb	07 - 31-Mar	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM		Yes	Yes	One Lambda, Innocrin, Olerup	Gel/Other		
35	20-Feb	20-Feb - 19-Mar	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	Jul-13	Yes	Yes	One Lambda, Life Technologies, GenDx	Gel/Fluorescence	4A2 02+05/2014: Rare DRB4 alleles could not be excluded	
38	19-Feb	20-Feb - 31-Mar	SBT/LUM	SBT/LUM	SBT/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	LUM	SSP/LUM	3.13.0 Jul 2013	Yes	Yes	One Lambda (SSO, SSP), Rose + Own Design (SBT)	Gel/Fluorescence	4A2 04/2014: Rare DQA alleles could not be excluded	
39	20-Feb	25-Feb	SBT/LUM	SBT/LUM	SBT/LUM	SSP/LUM	LUM		SSP/LUM	SSP	SSP	3.14.0	Yes	Yes	One Lambda, GenDx, Invitrogen, Olerup	Gel/Fluorescence		
41	20-Feb	07 - 31-Mar									SSP		Yes	Yes	Life Technologies, One Lambda	Gel/Fluorescence		
42	19-Feb	21-Feb	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM					SBT/LUM		Yes	Yes	One Lambda, GenDx	Fluorescence		
45	20-Feb	28-Feb	SSP/SBT	SSP/SBT	SSP/SBT	SSP/SBT	SSP/SBT		SSP/SBT		SSP/SBT	3.15.0	Yes	Yes		Gel/Fluorescence		
48	20-Feb	21-Feb - 04-Apr	SBT/LUM	SSP/SBT/LUM	SBT/LUM	SBT/LUM	LUM		SSP		SBT/LUM	3.15	Yes	Yes	Life Technologies, Olerup, Tepnel	Gel/Fluorescence		
62	20-Feb	24-Feb - 02-Apr	SSP/SSOP/SBT/LUM	SSP/SSOP/SBT/LUM	SSP/SSOP/SBT/LUM	SSP/SSOP/SBT/LUM	SSP/SSOP/LUM	SSP/SSOP/LUM	SSP/SSOP/LUM	SSOP/LUM	SSP/SSOP/SBT/LUM	3.13.1.0	Yes	Yes	One Lambda, Olerup, In-house Sequencing	Gel/Fluorescence		
101	19-Feb	20-Mar	SBT	SBT	SBT	SBT					SBT		Yes	Yes		Fluorescence		
103	18-Feb	26-Feb									LUM		Yes	Yes	One Lambda	Fluorescence		
109	19-Feb	25-Feb - 06-Mar									SSP/SSOP		Yes	Yes	One Lambda (SSO), Olerup (SSP)	Fluorescence/QIAxcell	HLA-DP 04/2014: *140:01 cannot be excluded	
112	20-Feb	20-Mar	LUM	LUM		LUM					SSP		Yes	Yes	One Lambda	Fluorescence		
113	19-Feb	25-Feb	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM	SSP		SSP/LUM		SSP	3.14.0.1	Yes	Yes	Ingen, Olerup	Gel		
115	20-Feb	20-Feb	SSP	SSP	SSP	SSP					SSP		Yes	Yes	Olerup	Gel		
119	28-Feb	19-Mar	SSP/SBT	SSP/SBT	SSP/SBT	SSP/SBT/LUM		SSP/LUM	SSP/LUM		SSP		Yes	Yes	One Lambda, Olerup, Invitrogen, Abbott	Gel/Fluorescence		
123	20-Feb	24-Feb+21-Mar	SSP	SSP	SSP	SSP	SSP	SSP	SSP		SSP		Yes	Yes	One Lambda	Gel		
126	24-Feb	27-Feb	SSP	SSP	SSP	SSP	SSP	SSP	SSP	SSP	SSP		Yes	Yes	Olerup	Gel		
128	19-Feb	24-Feb	LUM	LUM	LUM	LUM					LUM		Yes	Yes	One Lambda	Fluorescence		
130	19-Feb	12-Mar	SSP/SBT	SBT	SBT	SSP/SBT	SSP	SSP	SSP/SBT	SSP	SBT	3.13.1	Yes	Yes	Olerup (SSP), SBT Excelsator/GenDx (SBT)	Gel/Fluorescence		
132	19-Feb	14-Mar	SSP/SSOP/LUM	SSP/SSOP/LUM	SSP/SSOP/LUM	SSP/SSOP/LUM			SSP/SSOP/LUM		SSP/SSOP/LUM		Yes	Yes	LifeCodes (Immucor), Olerup	Gel/Luminex		
133	20-Feb	17+20-23-Mar	SSP/SBT	SSP/SBT	SSP/SBT	SSP/SBT					SSP/SBT		Yes	Yes	GenDx (SBT), Olerup (SSP)	Gel/Fluorescence		
141	20-Feb	19-Mar	SSP	SSP	SSP	SSP		SSP	SSP		SSP		Yes	Yes	Olerup	Gel	The samples were not received in good condition	
142	19-Feb	17-Mar	SBT	SBT	SBT	SBT					SBT	3.13.0	Yes	Yes	Protrans	Fluorescence		
145	19-Feb	28-Feb+11-Mar	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM		SSP/LUM	SSP/LUM		SSP/LUM		Yes	Yes	Invitrogen/Olerup (SSP), One Lambda (LUM)	Gel		
147	19-Feb	19-Feb	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM	SSP				LUM		Yes	Yes	Olerup, One Lambda	Gel/Fluorescence		
149	19-Feb	20-Feb	SSP/SBT/LUM	SSP/SBT/LUM	SSP/SBT/LUM	SSP/SBT/LUM		SSP	SSP		SSP		Yes	Yes	Protrans, Invitrogen, One Lambda, Abbott, Tepnel	Gel		
150	28-Feb	26-Feb	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM					SBT/LUM	Jan 2014	Yes	Yes	One Lambda	Fluorescence		
156	20-Feb	Mar	SSP/SBT	SSP/SBT	SSP/SBT	SSP/SBT					SSP		Yes	Yes	Olerup (SSP), Conexio (SBT)	Gel/ABI 3730		
158	19-Feb	1-Apr	SSP/SBT/LUM	SSP/SBT/LUM	SSP/SBT/LUM	SSP/SBT/LUM	SSP		SSP/SBT/LUM		SSP/SBT		Yes	Yes	Immucor (SSO), Olerup (SSP), GenDx (SBT)	Gel/Fluorescence		
164	24-Feb	25+27-Feb+06+12-Mar	SSP/SBT	SBT	SBT	SBT	SSP		SSP		SSP	3.13.1.0 Jul 2013	Yes	Yes	Celera, Olerup	Gel/Fluorescence		
165	5-Mar	12-Mar	SSP/SSOP	SSP/SSOP	SSP/SSOP	SSP/SSOP	SSOP	SSOP	SSP/SSOP	SSOP	SSOP		Yes	Yes		Gel/Fluorescence		
178	20-Feb	31-Mar	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM		SSP	SSP/LUM		SSP		Yes	Yes	Genovision, Olerup, Invitrogen	Gel		
185	19-Feb	28-Feb	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM					SSP/SBT/LUM	3.12.0	Yes	Yes	Protrans (SBT), Olerup (SSP), Immucor (SSO)	Gel		
196	21-Feb	02-12-Mar	SBT/LUM	SBT/LUM	SBT/LUM	SBT/LUM		SSP	SSP		SSP		Yes	Yes	Olerup, Protrans, One Lambda	Gel		
223	19-Feb	13-Mar				SSP		SSP	SSP		SSP		Yes	Yes	Invitrogen, Olerup	Gel		
225	21-Feb	14-Mar				SSP		SSP	SSP		SSP		Yes	Yes	Olerup	Gel		
232	20-Feb	10-Mar				SSOP/LUM			SSP		SSP		Yes	Yes	Olerup (SSP), GenProbe (SSOP)	Gel/Fluorescence		
242	20-Feb	15-Feb	SBT	SBT	SBT	SBT					SBT		Yes	Yes		Fluorescence		
245	19-Feb	19-Feb	SBT	SBT	SBT	SBT/LUM	SSP		SSP/SBT		SSP	3.13.0	Yes	Yes	Protrans (SBT), One Lambda (LUM), Olerup/Invitrogen (SSP)	Gel/Fluorescence		
248	31-Jan	18-Mar	SSP/SSOP/LUM	SSP/SSOP/LUM	SSP/SSOP/LUM	SSP/SSOP/LUM			SSP		SSP		Yes	Yes		Gel/Fluorescence		
259	20-Feb	24-31-Mar	SSP	SSP	SSP	SSP					SSP	3.15.0.07	Yes	Yes	Olerup	Gel		
260	20-Feb	24-Feb	SBT	SBT	SBT	SBT					SBT		Yes	Yes	Qiagen	Sequencer		
267	19-Feb	27-Feb	SBT	SBT	SBT	LUM			LUM		LUM	3.13.0 (SBT), 3.14.0 (LUM)	Yes	Yes	Protrans (SBT), Immucor (LUM)	Fluorescence		
268	24-Feb	Mar	SSP/LUM/NGS	SSP/LUM/NGS	SSP/LUM/NGS	SSP/LUM	SSP		SSP/LUM/NGS		SSP/NGS	3.15.0	Yes	Yes	One Lambda (LUM), Olerup/Invitrogen (SSP), Own Design (NGS)	Gel/Fluorescence		
304	19-Feb	26-Feb	SSP/LUM	SSP/LUM	SSP/LUM	SSP/LUM			SSP/LUM		SSP/LUM		Yes	Yes	Ingen, Bionobis	Gel/Fluorescence		

* Methods used
 SSP = PCR-SSP
 SSOP = PCR-SSOP
 revSSOP = reverse SSOP
 LUM = Luminex

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 01/2014 DESPATCHED ON 18TH FEBRUARY 2014

Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1*	DRB1*	DRB3*	DRB4*	DQA1*	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*	Comments
9	2nd field	2nd field		2nd field		2nd field	04:01	11:01	02:02	01:03			03:01	03:02			02:01	04:02	
11																	02:01	04:02	
12	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02			02:01	04:02	
15	2nd field		2nd field	2nd field	2nd field	2nd field	04:01	11:01/11:97			03:01	05:05	03:01	03:02	01:03		02:01	04:02	
19	2nd field			2nd field		2nd field	04:01:01	11:01:01/11:01:08/11:97	02:02:01:01/02:02:01:07	01:01:01:01/01:03:01:07			03:01:01:01/01:03:03:02:01	03:02:01			02:01:02	04:02:01:01/04:02:01:02	
20	2nd field		2nd field	2nd field		2nd field	04:01	11:01/11:97	+	+	03:01	05:05	03:01	03:02			02:01/141:01	04:02	
23	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02			02:01	04:02	
24	2nd field			2nd field		2nd field	04:01	11:01	02:02	01:01			03:01	03:02			02:01	04:02	
25	2nd field						04:01	11:01											
26	2nd field			2nd field			04:01	11:01					03:01	03:02					
28						2nd field											02:01	04:02	
29	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02					
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01	11:01	02:02	01:03	03:01	05:05	03:01	03:02	01:03		02:01	04:02	
35	2nd field	2nd field	2nd field	2nd field		2nd field	04:01	11:01	02:02	01:03	03:01	05:05	03:01	03:02			02:01	04:02	
38	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02	01:03		02:01/141:01	04:02	
39	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
41	2nd field			2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
42	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02			02:01	04:02	
45	2nd field			2nd field		2nd field	04:01:01	11:01/11:97	02:02/02:28	01:03:01:01/01:03:01:03/01:03:02			03:01:01	03:02:01			02:01:02/141:01	04:02:01	
48	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
62	2nd field	2nd field		2nd field		2nd field	04:01:01	11:01:00	02:02	01:03	03:01	05:05/05:09/05:11	03:01	03:02	01:03		02:01/141:01	04:02:01	
101	2nd field			2nd field			04:01	11:01/11:97					03:01	03:02					
103				2nd field									03:01/03:27/03:28/03:29/03:35/03:42/03:44/03:47/03:49/03:50/03:51/03:83/03:84N	03:02/03:02/62/63/64/67/68/81/85					
109				2nd field		2nd field							03:01	03:02			02:01	04:02	
112	2nd field						04:01	11:01											
113	2nd field			2nd field		2nd field	04:01	11:01	02:02	01:03			03:01	03:02					
115	2nd field	2nd field		2nd field		2nd field	04:01	11:01	02:02	01:03			03:01	03:02					
119	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
123	2nd field	2nd field		2nd field		2nd field	04:01	11:01	02:02	01:03			03:01	03:02					
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01	11:01	02:02	01:03	03:01	05:05	03:01	03:02	01:03		02:01	04:02	
128	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02					
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01:01	11:01:01	02:02	01:03	03:01	05:05	03:01:01	03:02:01	01:03		02:01:02	04:02:01	
132	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02			02:01	04:02	
133	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02					
141	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
142	2nd field			2nd field		2nd field	04:01	11:01											
145	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
147	2nd field	2nd field		2nd field		2nd field	04:01	11:01:01/11:01:08/11:97	02:02	01:03			03:01	03:02			02:01	04:02	
149	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02					
150	2nd field			2nd field		2nd field	04:01:01	11:01:01					03:01:01:01/02:03	03:02:01					
156	2nd field			2nd field		2nd field	04:01:01	11:01:01					03:01	03:02			02:01	04:02	
158	2nd field	2nd field		2nd field		2nd field	04:01	11:01	02:02	01:03			03:01	03:02			02:01	04:02	
164	2nd field	2nd field		2nd field		2nd field	04:01	11:01	02:02	01:03			03:01	03:02			02:01	04:02	
165	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01	11:01	02:02	01:03	03:01	05:05	03:01	03:01	01:03	01:03	02:01	04:02	
178	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
185	2nd field	2nd field		2nd field		2nd field	04:01	11:01/11:97	02:02	01:01/03/06			03:01	03:02			02:01/141:01	04:02/105:01	
196	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02					
223	2nd field		2nd field	2nd field		2nd field	04:01	11:01			03:01	05:05	03:01	03:02			02:01	04:02	
225	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02			02:01	04:02	
232	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02					
242	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02					
245	2nd field	2nd field		2nd field		2nd field	04:01	11:01/11:97	02:02	01:03			03:01	03:02			02:01	04:02	
248	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02					
259	2nd field			2nd field		2nd field	04:01:01	11:01					03:01:01:01	03:02:01					
260	2nd field			2nd field		2nd field	04:01	11:01					03:01:01	03:02:01					
267	2nd field	2nd field		2nd field		2nd field	04:01/04:33	11:01/11:29/11:66	02:02/02:10				03:01/03:02	03:02/03:19			02:01	04:02/105:01	
268	2nd field	2nd field		2nd field		2nd field	04:01	11:01	02:02	01:03			03:01	03:02			02:01	04:02	
304	2nd field			2nd field		2nd field	04:01	11:01					03:01	03:02					

Using protrans reagents we could not exclude the DRB1*11:97 allele as we do not sequence the class II exon 3 region

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 02/2014 DESPATCHED ON 18TH FEBRUARY 2014

Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1*	DRB1*	DRB4*	DRB4*	DQA1* DQA1*	DQB1*	DQB1*	DPA1* DPA1*	DPB1*	DPB1*	MICA* MICA*	Comments
9	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03		02:02	03:02		01:01	04:01		
11						2nd field									01:01	04:01		
12	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
15	2nd field		2nd field	2nd field	2nd field	2nd field	04:05	07:01			02:01 03:03	02:02	03:02	01:03 02:02	01:01	04:01		
19	2nd field			2nd field		2nd field	04:05:01	07:01:01:01:07:01:01:02	01:01:01:01:01:01:03:01:01:03:01:03:01:06:01:03:02			02:02:01	03:02:01		01:01:01	04:01:01:01:04:01:01:02		
20	2nd field		2nd field	2nd field		2nd field	04:05	07:01	+		02:01 03:03	02:02	03:02		01:01	04:01		
23	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
24	2nd field			2nd field		2nd field	04:05	07:01	01:01			02:02	03:02		01:01	04:01		
25	2nd field			2nd field		2nd field	04:05/04:90	07:01/07:11				02:02	03:02		01:01	04:01		
26	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
28						2nd field									01:01	04:01		
29	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01	01:03	02:01 03:03	02:02	03:02	01:03 02:02	01:01	04:01		
35	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01	01:03	02:01 03:03	02:02	03:02		01:01	04:01		
38	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02	01:03 02:02/02:05	01:01	04:01		
39	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02		01:01	04:01		
41	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:01	02:02	03:02		01:01	04:01		
42	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
45	2nd field			2nd field		2nd field	04:05:01	07:01:01	01:01:01:01:01:01:03:01:01:03:01:03:01:03:02		02:02	03:02:01		01:01:01	04:01:01			
48	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02		01:01	04:01		
62	2nd field	2nd field	2nd field	2nd field		2nd field	04:05:01	07:01:01	01:01	01:03	02:01 03:01/03:02/03:03	02:02	03:02	01:03 02:02/02:05	01:01:01	04:01:01		
101	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					
103				2nd field		2nd field						02:02/02:12	03:02/03:85					
109				2nd field		2nd field						02:02	03:02		01:01	04:01		
112	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					
113	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:02		02:02	03:02					
115	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03		02:02	03:02					
119	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02		01:01	04:01		
123	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03		02:02	03:02					
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01	01:03	02:01 03:03	02:02	03:02	01:03 02:02	01:01	04:01		
128	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05:01	07:01:01	01:01	01:03	02:01 03:03	02:02:01	03:02:01	01:03 02:02	01:01:01	04:01:01		
132	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
133	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					
141	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02		01:01	04:01		
142	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					
145	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02		01:01	04:01		
147	2nd field	2nd field		2nd field		2nd field	04:05:01	07:01:01	01:01	01:03		02:02	03:02		01:01	04:01		
149	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02					
150	2nd field			2nd field		2nd field	04:05:01	07:01:01:01:07:01:01:02				02:02:01	03:02:01					
156	2nd field			2nd field		2nd field	04:05:01	07:01:01				02:02	03:02		01:01	04:01		
158	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01/03:01N	01:03		02:02	03:02		01:01	04:01		
164	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03		02:02	03:02		01:01	04:01		
165	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01		02:01 03:01	02:02	03:02	01:03 02:02	01:01	04:01		
178	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02		01:01	04:01		
185	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01/01:03/01:06			02:02	03:02		01:01	04:01/126:01		DPB1*39:01, 90:01 and DPB1*150:01 and 158:01 cannot be excluded
196	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01 03:03	02:02	03:02		01:01	04:01		
223	2nd field		2nd field	2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
225	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
232	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					
242	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					
245	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03		02:02	03:02		01:01	04:01		
248	2nd field			2nd field		2nd field	04:05	07:01				02:01	05:01					
259	2nd field			2nd field		2nd field	04:05:01	07:01:01:01				02:02:01	03:02:01					
260	2nd field			2nd field		2nd field	04:05:01	07:01:01				02:02:01	03:02:01					
267	2nd field	2nd field		2nd field		2nd field	04:05	07:01/07:05/07:11/07:13	01:01/01:03			02:02	03:02		01:01	04:01		
268	2nd field	2nd field		2nd field		2nd field	04:05	07:01				02:02	03:02		01:01	04:01		
304	2nd field			2nd field		2nd field	04:05	07:01				02:02	03:02					

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 03/2014 DESPATCHED ON 18TH FEBRUARY 2014

Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1*	DRB1*	DRB3*	DQA1* DQA1*	DQB1*	DQB1*	DPA1* DPA1*	DPB1*	DPB1*	MICA* MICA*	Comments
9	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01		
11	2nd field			2nd field		2nd field	03:01	10:01			02:01	05:01		01:01	02:01		
12	2nd field			2nd field		2nd field	03:01	10:01			02:01	05:01		01:01	02:01		
15	2nd field		2nd field	2nd field	2nd field	2nd field	03:01	10:01		01:01/0 05:01	02:01	05:01	01:03 02:01	01:01	02:01		
19	2nd field			2nd field		2nd field	03:01:01:01/03:01:01:02	10:01:01		01:01:02:01/01:01:02:02	02:01:01	05:01:01:01/05:01:01:02/05:18/05:27/05:31/05:32		01:01:01	02:01:02		
20	2nd field		2nd field	2nd field		2nd field	03:01	10:01	+	01:05 05:01	02:01	05:01		01:01	02:01/141:01		
23	2nd field			2nd field		2nd field	03:01	10:01			02:01	05:01		01:01	02:01		
24	2nd field			2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01		
25	2nd field						03:01	10:01									
26	2nd field			2nd field			03:01	10:01			02:01	05:01					
28						2nd field								01:01	02:01		
29	2nd field			2nd field			03:01	10:01			02:01	05:01					
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:05 05:01	02:01	05:01	01:03 02:01	01:01	02:01		
35	2nd field	2nd field	2nd field	2nd field		2nd field	03:01	10:01	01:01	01:05 05:01	02:01	05:01		01:01	02:01		
38	2nd field		2nd field	2nd field		2nd field	03:01	10:01/10:06		01:05 05:01	02:01	05:01	01:03 02:01	01:01	02:01/141:01		
39	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05 05:01	02:01	05:01		01:01	02:01		
41	2nd field			2nd field		2nd field	03:01	10:01		01:01 05:01	02:01	05:01		01:01	02:01		
42	2nd field			2nd field		2nd field	03:01	10:01			02:01	05:01		01:01	02:01		
45	2nd field			2nd field		2nd field	03:01	10:01:01	01:01/01:04		02:01:01	05:01:01		01:01:01	02:01:02/141:01		
48	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05 05:01	02:01	05:01		01:01	02:01		
62	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01	01:01/0 05:01	02:01	05:01	01:03 02:01	01:01:01	02:01/141:01		
101	2nd field			2nd field			03:01	10:01			02:01	05:01					
103				2nd field							02:01/02:27	05:01/05:12/05:18/05:27/05:30/05:31/05:32					
109				2nd field		2nd field					02:01	05:01		01:01	02:01		
112	2nd field						03:01	10:01									
113	2nd field	2nd field		2nd field			03:01	10:01	01:01		02:01	05:01					
115	2nd field	2nd field		2nd field			03:01	10:01	01:01		02:01	05:01					
119	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05 05:01	02:01	05:01		01:01	02:01		
123	2nd field	2nd field		2nd field			03:01	10:01	01:01		02:01	05:01					
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:05 05:01	02:01	05:01	01:03 02:01	01:01	02:01		
128	2nd field			2nd field			03:01	10:01			02:01	05:01					
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:05 05:01	02:01:01	05:01:01	01:03 02:01	01:01:01	02:01:02		
132	2nd field			2nd field		2nd field	03:01	10:01			02:01	05:01		01:01	02:01		
133	2nd field			2nd field			03:01	10:01			02:01	05:01					
141	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05 05:01	02:01	05:01		01:01	02:01		
142	2nd field						03:01	10:01									
145	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05 05:01	02:01	05:01		01:01	02:01		
147	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01		
149	2nd field		2nd field	2nd field			03:01	10:01		01:05 05:01	02:01	05:01					
150	2nd field			2nd field			03:01:01:01/03:01:01:02	10:01:01			02:01:01	05:01:01:01/02					
156	2nd field			2nd field		2nd field	03:01:01	10:01:01			02:01	05:01		01:01	02:01		
158	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01		
164	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01		
165	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:01 05:01	02:01	05:01	01:03 02:01	01:01	02:01		
178	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05 05:01	02:01	05:01		01:01	02:01		
185	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01/141:01		DPB1*08:01, 158:01 and DPB1*71:01, 122:01 cannot be excluded
196	2nd field		2nd field	2nd field			03:01	10:01		01:05 05:01	02:01	05:01					
223	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05 05:01	02:01	05:01		01:01	02:01		
225	2nd field			2nd field		2nd field	03:01	10:01			02:01	05:01					
232	2nd field			2nd field			03:01	10			02:01	05:01					No DRB1*10 kit in our laboratory
242	2nd field			2nd field			03:01	10:01			02:01	05:01					
245	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01		
248	2nd field			2nd field			03:01	10:01			02:01	05:01					
259	2nd field			2nd field			03:01	10:01			02:01:01	05:01					
260	2nd field			2nd field			03:01:01	10:01:01			02:01:01	05:01:01					
267	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01/01:02		02:01	05:01		01:01	02:01		
268	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01		02:01	05:01		01:01	02:01		
304	2nd field			2nd field			03:01	10:01			02:01	05:01					

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 04/2014 DESPATCHED ON 18TH FEBRUARY 2014

Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1*	DRB1*	DRB5*	DQA1*	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*	MICA*	MICA*	Comments
9	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01			
11				2nd field		2nd field										05:01	10:01			
12	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01			
15	2nd field		2nd field	2nd field	2nd field	2nd field	01:01/50	15:01		01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01			
19	2nd field			2nd field		2nd field	01:01/01/01:50	15:01:01:01/15:01:01:02/15:01:01:03/15:01:04/15:01:17	01:01:01			05:01:01:01/05:01:01:02	06:02:01			05:01:01	10:01			
20	2nd field		2nd field	2nd field		2nd field	01:01/01:50	15:01	+	01:01	01:02/01:11	05:01	06:02			05:01/135:01	10:01			
23	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01			
24	2nd field			2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01			
25	2nd field						01:01/01:15/01:18/01:20/01:24	15:01/15:66/15:02/15:05/15:07												
26	2nd field			2nd field		2nd field	01:01/01:50	15:01				05:01	06:02							
28						2nd field										05:01	10:01			
29	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02							
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01			
35	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02			05:01	10:01			
38	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01/01:12	01:02/01:11	05:01	06:02	02:01	02:02/02:05	05:01	10:01			
39	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01			
41	2nd field			2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01			
42	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01			
45	2nd field			2nd field		2nd field	01:01/01/01:50	15:01	01:01:01			05:01:01	06:02:01			05:01/135:01	10:01			
48	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01/05:51	06:02/06:20			05:01	10:01			
62	2nd field	2nd field		2nd field		2nd field	01:01:01	15:01	01:01	01:01/01:12	01:02/01:11	05:01	06:02	02:01	02:02/02:05	05:01	10:01			
101	2nd field			2nd field			01:01	15:01				05:01	06:02							
103				2nd field								05:01/05:07/05:12/05:18/05:20/05:22/05:25/05:27/05:29/05:30/05:31/05:32	06:02/06:72/06:73/06:74/06:79/06:80/06:84/06:95/06:97							
109				2nd field		2nd field						05:01	06:02							
112	2nd field					2nd field	01:01	15:01								05:01	10:01			
113	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02							
115	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02							
119	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01			
123	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02							
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01			
128	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02							
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01:01	15:01:01	01:01	01:01	01:02	05:01:01	06:02:01	02:01	02:02	05:01:01	10:01			
132	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01			
133	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02							
141	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01			
142	2nd field						01:01	15:01												Using the protrans reagents we could not exclude the DRB1*01:50 allele as we do not sequence the class II exon 3 region
145	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01			
147	2nd field	2nd field		2nd field		2nd field	01:01/01/01:50	15:01	01:01			05:01	06:02			05:01	10:01			
149	2nd field		2nd field	2nd field			01:01	15:01		01:01	01:02	05:01	06:02							
150	2nd field			2nd field			01:01:01	15:01:01:01/15:01:01:02/03/04				05:01:01:01/02	06:02:01							
156	2nd field			2nd field		2nd field	01:01/01:05	15:01				05:01	06:02			05:01	10:01			
158	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01			
164	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01			
165	2nd field	2nd field		2nd field	2nd field	2nd field	01:01	15:01	01:01			05:01	06:02							
178	2nd field		2nd field	2nd field		2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01			
185	2nd field	2nd field		2nd field		2nd field	01:01/01:50	15:01	01:01			05:01	06:02			05:01/135:01	10:01			
196	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02							
223	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01			
225	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01			
232	2nd field			2nd field			01:01	15:01				05:01	06:02							
242	2nd field			2nd field			01:01	15:01				05:01	06:02							
245	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01			
248	2nd field			2nd field			01:01	15:01				05:01	06:02							
259	2nd field			2nd field			01:01	15:01:01:01				05:01	06:02:01							
260	2nd field			2nd field			01:01:01	15:01:01				05:01:01	06:02:01							
267	2nd field	2nd field		2nd field		2nd field	01:01/01:07	15:01/15:20	01:01			05:01	06:02/06:11			05:01	10:01			
268	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01			
304	2nd field			2nd field			01:01	15:01				05:01	06:02							

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 02/2014 DESPATCHED ON 18TH FEBRUARY 2014

							DRB1*	DRB1*	DRB4*	DRB4*	DQA1*	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*	
							04:05	07:01	01:01	01:03	02:01	03:03	02:02	03:02	01:03	02:02	01:01	04:01	Acceptable
								07:11	01:03/06			03:01/02							Acceptable
								07:05/13	03:01N	01:02		03:01 only	02:01	05:01					Unacceptable
Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1*	DRB1*	DRB4*	DRB4*	DQA1*	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*	
9	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03			02:02	03:02			01:01	04:01	A
11				2nd field		2nd field											01:01	04:01	A
12	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
15	2nd field		2nd field	2nd field	2nd field	2nd field	04:05	07:01			02:01	03:03	02:02	03:02	01:03	02:02	01:01	04:01	A
19	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
20	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
23	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
24	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
25	2nd field						04:05	07:01/11											A
26	2nd field			2nd field			04:05	07:01					02:02	03:02					A
28						2nd field											01:01	04:01	A
29	2nd field			2nd field			04:05	07:01					02:02	03:02					A
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01	01:03	02:01	03:03	02:02	03:02	01:03	02:02	01:01	04:01	A
35	2nd field	2nd field	2nd field	2nd field		2nd field	04:05	07:01	01:01	01:03	02:01	03:03	02:02	03:02			01:01	04:01	A
38	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
39	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
41	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
42	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
45	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
48	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
62	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03			02:02	03:02			01:01	04:01	A
101	2nd field			2nd field			04:05	07:01					02:02	03:02					A
103				2nd field									02:02	03:02					A
109				2nd field		2nd field							02:02	03:02			01:01	04:01	A
112	2nd field						04:05	07:01					02:02	03:02					A
113	2nd field	2nd field		2nd field			04:05	07:01	01:01	01:03			02:02	03:02					U
115	2nd field	2nd field		2nd field			04:05	07:01	01:01	01:03			02:02	03:02					A
119	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
123	2nd field	2nd field		2nd field			04:05	07:01	01:01	01:03			02:02	03:02					A
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01	01:03	02:01	03:03	02:02	03:02	01:03	02:02	01:01	04:01	A
128	2nd field			2nd field			04:05	07:01					02:02	03:02					A
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01	01:03	02:01	03:03	02:02	03:02	01:03	02:02	01:01	04:01	A
132	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
133	2nd field			2nd field			04:05	07:01					02:02	03:02					A
141	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
142	2nd field						04:05	07:01											A
145	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
147	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03			02:02	03:02			01:01	04:01	A
149	2nd field		2nd field	2nd field			04:05	07:01			02:01	03:03	02:02	03:02					A
150	2nd field			2nd field			04:05	07:01					02:02	03:02					A
156	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
158	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01/03:01N	01:03			02:02	03:02			01:01	04:01	U
164	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03			02:02	03:02			01:01	04:01	A
165	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:05	07:01	01:01		02:01	03:01	02:02	03:02	01:03	02:02	01:01	04:01	U
178	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
185	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01/03:06				02:02	03:02			01:01	04:01	A
196	2nd field		2nd field	2nd field			04:05	07:01			02:01	03:03	02:02	03:02					A
223	2nd field		2nd field	2nd field		2nd field	04:05	07:01			02:01	03:03	02:02	03:02			01:01	04:01	A
225	2nd field			2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
232	2nd field			2nd field			04:05	07:01					02:02	03:02					A
242	2nd field			2nd field			04:05	07:01					02:02	03:02					A
245	2nd field	2nd field		2nd field		2nd field	04:05	07:01	01:01	01:03			02:02	03:02			01:01	04:01	A
248	2nd field			2nd field			04:05	07:01					02:01	05:01					U
259	2nd field			2nd field			04:05	07:01					02:02	03:02					A
260	2nd field			2nd field			04:05	07:01					02:02	03:02					A
267	2nd field	2nd field		2nd field		2nd field	04:05	07:01/05/11/13	01:01/03				02:02	03:02			01:01	04:01	U
268	2nd field	2nd field		2nd field		2nd field	04:05	07:01					02:02	03:02			01:01	04:01	A
304	2nd field			2nd field			04:05	07:01					02:02	03:02					A

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 03/2014 DESPATCHED ON 18TH FEBRUARY 2014

							DRB1*	DRB1*	DRB3*	DQA1*	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*	
							03:01	10:01	01:01	01:05	05:01	02:01	05:01	01:03	02:01	01:01	02:01	Acceptable
							01:02											Acceptable
							01:01											Unacceptable
Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1*	DRB1*	DRB3*	DQA1* res	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*	
9	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
11				2nd field		2nd field										01:01	02:01	A
12	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
15	2nd field		2nd field	2nd field	2nd field	2nd field	03:01	10:01		01:01/05	05:01	02:01	05:01	01:03	02:01	01:01	02:01	A
19	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
20	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
23	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
24	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
25	2nd field						03:01	10:01										A
26	2nd field			2nd field			03:01	10:01				02:01	05:01					A
28						2nd field										01:01	02:01	A
29	2nd field			2nd field			03:01	10:01				02:01	05:01					A
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:05	05:01	02:01	05:01	01:03	02:01	01:01	02:01	A
35	2nd field	2nd field	2nd field	2nd field		2nd field	03:01	10:01	01:01	01:05	05:01	02:01	05:01			01:01	02:01	A
38	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
39	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
41	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
42	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
45	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
48	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
62	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
101	2nd field			2nd field			03:01	10:01				02:01	05:01					A
103				2nd field								02:01	05:01					A
109				2nd field		2nd field						02:01	05:01			01:01	02:01	A
112	2nd field						03:01	10:01										A
113	2nd field	2nd field		2nd field			03:01	10:01	01:01			02:01	05:01					A
115	2nd field	2nd field		2nd field			03:01	10:01	01:01			02:01	05:01					A
119	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
123	2nd field	2nd field		2nd field			03:01	10:01	01:01			02:01	05:01					A
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:05	05:01	02:01	05:01	01:03	02:01	01:01	02:01	A
128	2nd field			2nd field			03:01	10:01				02:01	05:01					A
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:05	05:01	02:01	05:01	01:03	02:01	01:01	02:01	A
132	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
133	2nd field			2nd field			03:01	10:01				02:01	05:01					A
141	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
142	2nd field						03:01	10:01										A
145	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
147	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
149	2nd field		2nd field	2nd field			03:01	10:01		01:05	05:01	02:01	05:01					A
150	2nd field			2nd field			03:01	10:01				02:01	05:01					A
156	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
158	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
164	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
165	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	03:01	10:01	01:01	01:01	05:01	02:01	05:01	01:03	02:01	01:01	02:01	A
178	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
185	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
196	2nd field		2nd field	2nd field			03:01	10:01		01:05	05:01	02:01	05:01					A
223	2nd field		2nd field	2nd field		2nd field	03:01	10:01		01:05	05:01	02:01	05:01			01:01	02:01	A
225	2nd field			2nd field		2nd field	03:01	10:01				02:01	05:01			01:01	02:01	A
232	2nd field			2nd field			03:01	NT				02:01	05:01					A
242	2nd field			2nd field			03:01	10:01				02:01	05:01					A
245	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
248	2nd field			2nd field			03:01	10:01				02:01	05:01					A
259	2nd field			2nd field			03:01	10:01				02:01	05:01					A
260	2nd field			2nd field			03:01	10:01				02:01	05:01					A
267	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01/02			02:01	05:01			01:01	02:01	U
268	2nd field	2nd field		2nd field		2nd field	03:01	10:01	01:01			02:01	05:01			01:01	02:01	A
304	2nd field			2nd field			03:01	10:01				02:01	05:01					A

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 04/2014 DESPATCHED ON 18TH FEBRUARY 2014

							DRB1* 01:01 01:15/18/20/24	DRB1* 15:01 15:02/05/07	DRB5* 01:01	DQA1* 01:01	DQA1* 01:02	DQB1* 05:01	DQB1* 06:02 06:11/20	DPA1* 02:01	DPA1* 02:02	DPB1* 05:01	DPB1* 10:01	Acceptable Acceptable	
							01:07	15:20											Unacceptable
Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1*	DRB1*	DRB5*	DQA1*	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*		
9	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
11				2nd field		2nd field										05:01	10:01	A	
12	2nd field			2nd field	2nd field	2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
15	2nd field		2nd field	2nd field	2nd field	2nd field	01:01	15:01		01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01	A	
19	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
20	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
23	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
24	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
25	2nd field						01:01/15/18/20/24	15:01/15:02/15:05/15:07										A	
26	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
28						2nd field										05:01	10:01	A	
29	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01	A	
35	2nd field	2nd field	2nd field	2nd field		2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02			05:01	10:01	A	
38	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
39	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
41	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
42	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
45	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
48	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02/20			05:01	10:01	A	
62	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
101	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
103				2nd field								05:01	06:02					A	
109				2nd field		2nd field						05:01	06:02			05:01	10:01	A	
112	2nd field						01:01	15:01										A	
113	2nd field	2nd field		2nd field			01:01	15:01	01:01			05:01	06:02					A	
115	2nd field	2nd field		2nd field			01:01	15:01	01:01			05:01	06:02					A	
119	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
123	2nd field	2nd field		2nd field			01:01	15:01	01:01			05:01	06:02					A	
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01	A	
128	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01	A	
132	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
133	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
141	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
142	2nd field						01:01	15:01										A	
145	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
147	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
149	2nd field		2nd field	2nd field			01:01	15:01		01:01	01:02	05:01	06:02					A	
150	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
156	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
158	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
164	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
165	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	01:01	15:01	01:01	01:01	01:02	05:01	06:02	02:01	02:02	05:01	10:01	A	
178	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
185	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
196	2nd field		2nd field	2nd field			01:01	15:01		01:01	01:02	05:01	06:02					A	
223	2nd field		2nd field	2nd field		2nd field	01:01	15:01		01:01	01:02	05:01	06:02			05:01	10:01	A	
225	2nd field			2nd field		2nd field	01:01	15:01				05:01	06:02			05:01	10:01	A	
232	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
242	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
245	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
248	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
259	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
260	2nd field			2nd field			01:01	15:01				05:01	06:02					A	
267	2nd field	2nd field		2nd field		2nd field	01:01/07	15:01/20	01:01			05:01	06:02/06:11			05:01	10:01	U	
268	2nd field	2nd field		2nd field		2nd field	01:01	15:01	01:01			05:01	06:02			05:01	10:01	A	
304	2nd field			2nd field			01:01	15:01				05:01	06:02					A	

SCHEME 4A2 – CLASS II DNA HLA TYPING TO 2ND FIELD RESOLUTION

RESULTS OF PARTICIPATING LABORATORIES

SAMPLE 4A2 05/2014 DESPATCHED ON 18TH FEBRUARY 2014

							DRB1*	DRB1*	DRB4*	DRB4*	DQA1*	DQA1*	DQB1*	DQB1*	DPA1*	DPA1*	DPB1*	DPB1*	
							04:01	07:01	01:01	01:03	02:01	03:03	02:02	03:01	01:03	02:01	04:01	11:01	Acceptable
								07:11	01:03/06			03:01/02		03:19					Acceptable
								07:05/13	03:01N			03:01 only							Unacceptable
Lab No.	DRB1* res	DRB3*/4*/5* res	DQA1* res	DQB1* res	DPA1* res	DPB1* res	DRB1* res	DRB1* res	DRB4* res	DRB4* res	DQA1* res	DQA1* res	DQB1* res	DQB1* res	DPA1* res	DPA1* res	DPB1* res	DPB1* res	
9	2nd field	2nd field		2nd field		2nd field	04:01	07:01	01:01	01:03			02:02	03:01			04:01	11:01	A
11				2nd field		2nd field											04:01	11:01	A
12	2nd field			2nd field	2nd field	2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
15	2nd field		2nd field	2nd field	2nd field	2nd field	04:01	07:01			02:01	03:03	02:02	03:01	01:03	02:01	04:01	11:01	A
19	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
20	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
23	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
24	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
25	2nd field						04:01	07:01/07:11											A
26	2nd field			2nd field			04:01	07:01					02:02	03:01					A
28						2nd field											04:01	11:01	A
29	2nd field			2nd field			04:01	07:01					02:02	03:01					A
34	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01	07:01	01:01	01:03	02:01	03:03	02:02	03:01	01:03	02:01	04:01	11:01	A
35	2nd field	2nd field	2nd field	2nd field		2nd field	04:01	07:01	01:01	01:03	02:01	03:03	02:02	03:01			04:01	11:01	A
38	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
39	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
41	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
42	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
45	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
48	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
62	2nd field	2nd field		2nd field		2nd field	04:01	07:01	01:01	01:03	02:01	03:01/02/03	02:02	03:01			04:01	11:01	A
101	2nd field			2nd field			04:01	07:01					02:02	03:01					A
103				2nd field									02:02	03:01					A
109				2nd field		2nd field							02:02	03:01			04:01	11:01	A
112	2nd field						04:01	07:01											A
113	2nd field	2nd field		2nd field			04:01	07:01	01:01	01:03			02:02	03:01					A
115	2nd field	2nd field		2nd field			04:01	07:01	01:01	01:03			02:02	03:01					A
119	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
123	2nd field	2nd field		2nd field			04:01	07:01	01:01	01:03			02:02	03:01					A
126	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01	07:01	01:01	01:03	02:01	03:03	02:02	03:01	01:03	02:01	04:01	11:01	A
128	2nd field			2nd field			04:01	07:01					02:02	03:01					A
130	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01	07:01	01:01	01:03	02:01	03:03	02:02	03:01	01:03	02:01	04:01	11:01	A
132	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
133	2nd field			2nd field			04:01	07:01					02:02	03:01					A
141	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
142	2nd field						04:01	07:01											A
145	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
147	2nd field	2nd field		2nd field		2nd field	04:01	07:01	01:01	01:03			02:02	03:01			04:01	11:01	A
149	2nd field		2nd field	2nd field			04:01	07:01			02:01	03:03	02:02	03:01					A
150	2nd field			2nd field			04:01	07:01					02:02	03:01					A
156	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
158	2nd field	2nd field		2nd field		2nd field	04:01	07:01	01:01/03:01N	01:03			02:02	03:01			04:01	11:01	U
164	2nd field	2nd field		2nd field		2nd field	04:01	07:01	01:01	01:03			02:02	03:01			04:01	11:01	A
165	2nd field	2nd field	2nd field	2nd field	2nd field	2nd field	04:01	07:01	01:01		02:01	03:01	02:02	03:01	01:03	02:01	04:01	11:01	U
178	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
185	2nd field	2nd field		2nd field		2nd field	04:01	07:01	01:01/03/06				02:02	03:01			04/01	11:01	A
196	2nd field		2nd field	2nd field			04:01	07:01			02:01	03:03	02:02	03:01					A
223	2nd field		2nd field	2nd field		2nd field	04:01	07:01			02:01	03:03	02:02	03:01			04:01	11:01	A
225	2nd field			2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
232	2nd field			2nd field			04:01	07:01					02:02	03:01					A
242	2nd field			2nd field			04:01	07:01					02:02	03:01					A
245	2nd field	2nd field		2nd field		2nd field	04:01	07:01	01:01	01:03			02:02	03:01			04:01	11:01	A
248	2nd field			2nd field			04:01	07:01					02:02	03:01					A
259	2nd field			2nd field			04:01	07:01					02:02	03:01					A
260	2nd field			2nd field			04:01	07:01					02:02	03:01					A
267	2nd field	2nd field		2nd field		2nd field	04:01	07:01/05/11/13	01:01/03				02:02	03:01/03:19			04:01	11:01	U
268	2nd field	2nd field		2nd field		2nd field	04:01	07:01					02:02	03:01			04:01	11:01	A
304	2nd field			2nd field			04:01	07:01					02:02	03:01					A