

		CH1				Hinge				CH2				CH3								SoBio				Sanquin				Sanquin				Binding Site											
		176	189	192	214	H1	H2	H3	H4	282	291	292	296	309	339	356	358	378	379	384	392	397	409	419	422	431	435	456	Mouse anti-				Mouse anti-				Sheep anti-				Sheep anti-				
		G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4	G1	G2	G3	G4								
IgG1	IGHG1*01	S	P	S	L	K					V	P	R	Y	L	A	D	L	A	V	N	K	V	K	Q	V	A	H	Y	+/-	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
	IGHG1*03	S	P	S	L	R					V	P	R	Y	L	A	E	M	A	V	N	K	V	K	Q	V	A	H	Y	+/-	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
	IGHG1*04	S	P	S	L	K					V	P	R	Y	L	A	D	L	A	V	N	K	V	K	Q	I	A	H	Y	+/-	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
	IGHG1*05	S	P	S	L	K					V	P	R	Y	L	A	D	L	A	V	N	K	V	K	Q	V	A	R	Y	+/-	-	-	-	+	-	-	-	+	-	+	-	+	-	+	-
	IGHG1*06	S	P	S	L	K					V	P	R	Y	L	A	D	L	A	V	N	K	V	K	Q	I	A	R	Y	+/-	-	-	-	+	-	-	-	+	-	+	-	+	-	+	-
	IGHG1*07	S	P	S	L	K					V	P	R	Y	L	A	D	L	A	V	N	K	V	K	Q	V	G	H	Y	+/-	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
	IGHG1*08	S	P	S	L	R					V	P	R	Y	L	A	D	L	A	V	N	K	V	K	Q	V	A	H	Y	+/-	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-
IgG2	IGHG2*01	S	P	N	F	T					V	P	R	F	V	T	E	M	A	V	N	K	M	K	Q	V	A	H	Y	-	+	-	-	-	+/-	-	-	-	+	-	-	-	+	-	-
	IGHG2*02	S	T	N	F	T					M	P	R	F	V	T	E	M	A	V	N	K	M	K	Q	V	A	H	Y	-	+	-	-	-	+/-	-	-	-	+	-	-	-	+	-	-
	IGHG2*04	S	P	S	L	T					V	P	R	F	V	T	E	M	A	V	N	K	M	K	Q	V	A	H	Y	-	+	-	-	-	+/-	-	-	-	+	-	-	-	+	-	-
	IGHG2*06	S	P	N	F	T					V	P	R	F	V	T	E	M	S	V	N	K	M	K	Q	V	A	H	Y	-	+	-	-	-	+/-	-	-	-	+	-	-	-	+	-	-
IgG3	IGHG3*01	S	P	S	L	R	+	+	+	+	V	P	R	Y	L	T	E	M	A	V	S	N	M	K	Q	I	A	R	F	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*03	S	P	S	L	R	+	+	+	+	V	P	R	Y	L	T	E	M	A	V	S	N	V	R	E	V	A	R	F	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*04	S	P	S	L	R	+		+	+	V	P	R	Y	L	T	E	M	A	V	S	N	M	K	Q	I	A	R	F	-	-	-	-	-	-	-	-	-	-	+	-	-	-	+	-
	IGHG3*06	S	P	S	L	R	+	+	+	+	V	P	R	Y	L	T	E	M	A	V	S	K	M	K	Q	I	A	R	F	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*08	S	P	S	L	R	+	+	+	+	V	P	R	Y	L	T	E	M	A	V	N	N	M	K	Q	I	A	R	F	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*09	S	P	S	L	R	+	+	+	+	V	P	R	Y	V	T	E	M	A	V	S	N	M	K	Q	I	A	R	F	-	-	+	-	-	-	+	-	-	+	+	-	-	+	+	-
	IGHG3*11	S	P	S	L	R	+	+	+	+	V	P	R	F	L	T	E	M	A	V	S	N	M	K	Q	I	A	R	F	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*12	S	P	S	L	R	+	+	+	+	V	P	R	F	L	T	E	M	A	V	S	N	M	K	Q	I	A	R	F	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*13	S	P	S	L	R	+	+	+	+	V	P	R	Y	L	T	E	M	A	V	S	K	M	K	E	I	A	R	F	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*14	S	P	S	L	R	+	+	+	+	V	L	R	Y	L	T	E	M	A	V	N	N	M	K	Q	I	A	R	Y	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*15	S	P	S	L	R	+	+	+	+	V	L	R	Y	L	T	E	M	A	V	N	K	M	K	Q	I	A	R	Y	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*16	S	P	S	L	R	+	+	+	+	V	L	R	Y	L	A	E	M	A	V	N	N	M	K	Q	I	A	R	Y	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
	IGHG3*17	S	P	N	F	R	+	+	+	+	V	P	R	Y	L	T	E	M	A	M	S	K	V	K	Q	I	A	H	Y	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-
IGHG3*18	Y	P	S	L	R	+	+	+	+	V	P	W	Y	L	T	E	M	A	M	S	K	V	K	Q	I	A	H	Y	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-	
IGHG3*19	S	P	S	L	R	+	+	+	+	V	P	W	Y	L	T	E	M	A	M	S	K	V	K	Q	I	A	H	Y	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+	-	
IgG4	IGHG4*01	S	P	S	L	R					V	P	R	F	L	A	E	M	A	V	N	K	V	R	E	V	A	H	Y	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+
	IGHG4*02	S	P	S	L	R					V	P	R	F	V	A	E	M	A	V	N	K	V	R	E	V	A	H	Y	-	-	-	+	-	-	-	+	-	+	-	+	-	+	-	+
	IGHG4*03	S	P	S	L	R					V	P	R	F	L	A	E	M	A	V	N	K	V	K	E	V	A	H	Y	-	-	-	+	-	-	-	+	-	-	-	+	-	-	-	+

Table S1. Human IgG isoallotype genetic variation and reactivities to anti-IgG subclass reagents. Canonical sequences for each IgG subclass are shown in light blue, with all known intra-subclass variants shown below each canonical sequence. Reactivity with each anti-IgG subclass specific antibody is shown to the right, with blind spots (and their corrections) shown in red, and cross-reactive antibodies (and their corrections) shown in blue. *For clarity, variant amino acids that differ between IgG subclasses but that do not vary within a subclass (ie isoallotype) are not shown. For a more comprehensive view of all known amino acid differences between the 29 isoallotypes please see (21)