Table S1 | **Key human antibody Fc region X-ray crystal structures**

Antibody Fc region	Domains crystallized	Fragment details	Complex status	References
IgG1 Fc	Cγ2 and Cγ3	Thr223–Lys447	Uncomplexed	1
			Complexed with fragment B of protein A	2
			Uncomplexed and complexed with FcγRIII	38
	Cγ2 and Cγ3	Cys226–Lys447	Complexed with FcγRIII	40
	Entire antibody (Dob)	Intact antibody lacking hinge region	Uncomplexed	96
	Entire antibody (Mcg)	Intact antibody lacking hinge region	Uncomplexed	97
	Entire antibody (b12)	Intact IgG1 with hinge region	Uncomplexed	11
IgE Fc	Cε3 and Cε4 with Cε2–Cε3 linker	Asp330–Lys547 with preceding Cys residue	Uncomplexed	4
	Cε2, Cε3 and Cε4	Lys234–Lys547 with point mutations (Asn265Gln and Asn371Gln) to facilitate crystallization	Complexed with FcεRI	3
			Uncomplexed	5
IgA Fc	Cα2 and Cα3 lacking tailpiece	Cys242–Lys454	Complexed with FcαRI	6

Table S2 | **Contributions to Fc stability**

Antibody	Surface area buried in protein–protein domain interactions (Å²) per Fc			Inter-heavy-chain disulphide bonds		Fc carbohydrate attachment sites analysed	Domain surface area buried by interaction with carbohydrate (Å²) per Fc	
				Hinge	*Fc*		*Penultimate domain*	*C-terminal domain*
IgG	Cγ2–Cγ2 None	Cγ2–Cγ3 1556	Cγ3–Cγ3 2180	2 or more (varies with subclass)	None	Asn297* in Cγ2	Cγ2: 1044	Cγ3: None
IgA	Cα2–Cα2 275	Cα2–Cα3 1662	Cα3–Cα3 2061	None	Three in Cα2: Cys241–Cys241 Cys242–Cys299* x 2	Asn263 in Cα2 Asn459 in tailpiece	Cα2: 930 Unknown	Cα3: 914 Unknown
IgE	Cε3–Cε3 None	Cε3–Cε4 1744	Cε4–Cε4 1860–2326	No hinge present	Two in Cε2: Cys241–Cys328 x 2	Asn394* in Cε3	Cε3: 900	Cε4: None

*Homologous residues.