

Ig origin**Binding to Protein G**

Human IgG1, IgG2, IgG3 and IgG4	Strong
Human IgA, IgD, IgE and IgM	No binding
Mouse IgG1, IgG2a, IgG2b and IgG3	Strong
Mouse IgM	Weak
Rat IgG1	Weak
Rat IgG2a, IgG2b and IgG2c	Strong
Bovine IgG	Strong
Chicken IgY	No binding
Dog IgG	Weak
Goat IgG1 and IgG2	Strong
Guinea pig IgG	Weak
Horse IgG	Strong
Monkey IgG	Strong
Porcine IgG	Strong
Rabbit IgG	Strong
Sheep IgG1 and IgG2	Strong

Ig origin**Binding to Protein A**

Human IgG1,2,4	Strong
Human IgG3	No binding
Human IgA, D, E, M	Weak
Mouse IgG1	Weak
Mouse IgG2a,2b, 3	Strong
Mouse IgM	Weak
Rat IgG1	Weak
Rat IgG2a	No binding
Rat IgG2b	No binding
Rat IgG2c	Strong
Bovine IgG1	Weak
Bovine IgG2	Strong
Chicken IgY	No binding
Dog IgG	Strong
Goat IgG1	Weak
Goat IgG2	Strong
Guinea pig IgG	Strong
Hamster	Weak
Horse IgG	Weak
Monkey IgG	Strong
Porcine IgG	Strong
Rabbit IgG	Strong
Sheep IgG1	Weak
Sheep IgG2	Strong

Table I: Binding of immunoglobulins to Protein L, Protein A & Protein G

	Protein L ^a	Protein A ^b	Protein G ^c
Human Ig			
IgG	++	+++	+++
IgM	++	+	-
IgA	++	+	-
IgE	++	+	-
IgD	++	+	-
Fab	++	+	+
F(ab')2	++	+	+
κ light chains	++	-	-
scFv	++	+	-
Mouse Ig			
IgG1	++	+	++
IgG2a	++	++	++
IgG2b	++	++	++
IgG3	++	+	++
IgM	++	+	-
IgA	++	++	+
Polyclonals			
Mouse	++	++	++
Rat	++	+	++
Rabbit	+	++	+++
Sheep	-	++	++
Goat	-	+	++
Bovine	-	+	++
Porcine	++	++	++
Chicken IgY	++	-	-

^a Protein L binds primarily to κ light chains and λV1 chains.^b Protein A binds to γFc and VH11 variable domains.^c Protein G binds to γFc and cy1 chains.

+++ = very strong binding, ++ = strong binding, + = moderate binding, - = no binding