

Proteins A and G Antibody Affinities

Protein A and Protein G readily bind the Fc regions of many IgG isotypes. For this reason, they are used extensively for affinity purification of antibodies from serum or cell culture supernatant, and for capture of immunoprecipitated protein complexes. When Protein A and Protein G microspheres are used as reagents in tests and assays, the immobilized antibodies may be crosslinked to the coated support for long-term stability.

Host Species	Antibody Class	Protein A Affinity Strength	Protein G Affinity Strength
Mouse	Total IgG	Strong	Strong
	IgG ₁	Weak	Medium
	IgG _{2a}	Strong	Strong
	IgG _{2b}	Strong	Strong
Rat	Total IgG	Weak	Medium
	IgG ₁	Weak	Medium
	IgG _{2a}	No Binding	Strong
	IgG _{2b}	No Binding	Weak
	IgG _{2c}	Strong	Strong
Human	Total IgG	Strong	Strong
	IgG ₁	Strong	Strong
	IgG ₂	Strong	Strong
	IgG ₃	Weak	Strong
	IgG ₄	Strong	Strong
Goat	Total IgG	Weak	Strong
	IgG ₁	Weak	Strong
	IgG ₂	Strong	Strong
Rabbit	Total IgG	Strong	Strong
Hamster	Total IgG	Weak	Medium
Sheep	Total IgG	Weak	Strong
	IgG ₁	Weak	Strong
	IgG ₂	Strong	Strong
Guinea Pig	Total IgG	Strong	Weak
Donkey	Total IgG	Medium	Strong