

NMab ProtG

Protein G affinity resin

NMab ProtG is an affinity resin prepared by immobilizing recombinant protein G ligands onto a rigid highly cross-linked agarose matrix through epoxy activation. Protein G has a broader binding capability with varied antibody molecules. It possesses the capacity to associate with Fc fragments of antibodies via robust interactions, while concurrently maintaining a comparatively weak interaction with Fab fragments of antibodies. NMab ProtG is often used to capture antibodies or antibody fragments from cell cultures, as well as other antibodies from various species of serum (table 2).

Table 1. Characteristics of NMab ProtG

Product name	NMab ProtG
Chromatography technique	Protein G affinity
Matrix	Highly cross-linked agarose
Coupling chemistry	Epoxy activation
Dynamic binding capacity	55~65 mg · mL ⁻¹ (Human IgG, 5 min retention time)
Maximum Pressure	0.3 MPa
CIP	6 M guanidine hydrochloride
Recommended flow rate	100-500 cm/h
pH stability	2-10
Chemistry stability	Stable in commonly used buffers, 20 mM sodium phosphate, 1% SDS, 6 M guanidine hydrochloride, 70% ethanol, 6 M urea, etc. Avoid long-term exposure to strong acids or strong bases.
Storage	2-8 °C, 20% Ethanol

Table 2. Affinity capacity of protein G to different species of antibodies.

Species	IgG Class	Protein G
Mouse	Total IgG	++++
	IgG1	++++
	IgG2a	++++
	IgG2b	+++
	IgG3	+++
Human	Total IgG	++++
	IgG1	++++
	IgG2	++++
	IgG3	++++
	IgG4	++++
Rat	Total IgG	++
	IgG1	+
	IgG2a	++++
	IgG2b	++
	IgG2c	++
Rabbit	Total IgG	+++
Donkey	Total IgG	++++
Sheep	Total IgG	++
	IgG1	++
Cow	IgG2	+++
	Total IgG	++++
Chicken	IgG1	+++
	IgG2	+++
Chicken	Total IgG	+