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A Geno Technology, Inc. (USA) brand name

Protein A (Recombinant)

(Cat. # 786-1266)



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INTRODUCTION

Protein A is a cell-wall receptor which is present on cell wall of various strains of *Staphylococcus aureus*. Protein A contains four high-affinity binding sites for interacting with the Fc region of immunoglobulin Gs of various species, including mouse, rabbit and human. Protein A is used for making probes for detection of antibodies and for making affinity media for purification of antibodies.

Protein A (Recombinant) is recombinant protein A expressed in *E. coli*. It functions similarly as the native Protein A.

Protein A (Recombinant) can be conjugated with reporter molecules, fluorescent dyes, enzyme markers, biotin or colloidal gold for detection of antibodies by immunochemical assays including ELISA, Western blotting or Immunohistochemistry.

Protein A (Recombinant) can be immobilized on a solid support such as agarose to purify monoclonal or polyclonal antibodies.

Table 1 depicts the relative affinities of Protein A and Protein G for various Immunoglobulin Gs. Protein A is preferred to Protein G for purifying polyclonal IgG from rabbit, pig and cat serum. Protein is preferred G for mouse IgG1, human IgG3 and rat, goat and cow antibodies.

ITEM(S) SUPPLIED

Cat. #	Description	Size
786-1266	Protein A (Recombinant)	5mg

STORAGE CONDITIONS

Protein A (Recombinant) is shipped as lyophilized powder at ambient temperature. Upon arrival, store at -20°C. This product is stable for 1 year when stored properly.

SPECIFICATIONS

- Source: *E. coli*.
- Molecular weight: ~47kDa; exact sequence as the native Protein A.
- Binds 3 IgG Isotypes.
- Purity: ≥ 95%, HPLC, Single major band.
- Form: Lyophilized powder.

Species	Antibody Class	Protein A	Protein G
Mouse	Total IgG	++++	++++
	IgG ₁	+	+++
	IgG _{2a}	++++	++++
	IgG _{2b}	++++	++++
	IgG ₃	+++	+++
Human	Total IgG	++++	++++
	IgG ₁	++++	++++
	IgG ₂	++++	++++
	IgG ₃	+	++++
	IgG ₄	++++	++++
Rat	Total IgG	+	++
	IgG ₁	-	+
	IgG _{2a}	-	++++
	IgG _{2b}	-	++
	IgG _{2c}	++	+++
Hamster	Total IgG	++	++
Guinea Pig	Total IgG	++++	++
Rabbit	Total IgG	++++	+++
Horse	Total IgG	++	++++
Cow	Total IgG	++	++++
Pig	Total IgG	+++	++
Sheep	Total IgG	+	++
Goat	Total IgG	+	++
Chicken	Total IgG	-	-

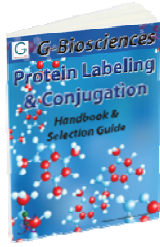
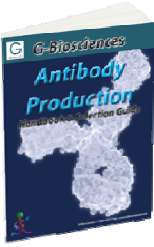
Table 1: Relative affinity of Protein A and Protein G for Immunoglobulins

PREPARATION BEFORE USE

Protein A (Recombinant) is supplied as a lyophilized powder. Reconstitute using molecular grade water or PBS. The reconstituted Protein A (Recombinant) can be stored at 4°C for 1 month for immediate use. For long term use, add equal volume of glycerol to the protein solution. Mix well, aliquot into small aliquots (preferably one time use) and store the aliquots at -20°C

RELATED PRODUCTS

Download our Protein Purification and Antibody Production Handbooks.



<http://info.gbiosciences.com/complete-Antibody-Production-handbook/>

<http://info2.gbiosciences.com/complete-protein-labeling-conjugation-handbook/>

For other related products, visit our website at www.GBiosciences.com or contact us.



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