

Protein A

#R00012

Size: 10 mg/100 mg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Protein A is a cell wall component produced by several strains of Staphylococcus aureus that consists of a single polypeptide chain and contains little or no carbohydrate. Recombinant Protein A is produced in E.Coli and functions essentially the same as native Protein A. It consists of 5 IgG-binding domains E-D-A-B-C aligned in series.

AA Sequence

NAAQHDEAQQNAFYQVLNMPNLNADQRNGFIQSLK
DDPSQSANVLGEAQKLND SQAPKADAQQNNFNKDQ
QSAFYEILNMPNLNEAQRNGFIQSLKDDPSQSTNVLG
EAKKLNESQAPKADNNFNKEQQNAFYEILNMPNLNE
EQRNGFIQSLKDDPSQSANLLSEAKKLNESQAPKAD
NKFNKEQQNAFYEILHLPNLNEEQRNGFIQSLKDDPS
QSANLLAEAKKLNDAQAPKADNKFNKEQQNAFYEIL
HLPNLTEEQRNGFIQSLKDDPSVSKEILAEAKKLNDA
QAPKEED

Reconstitution

Dissolve in distilled water or saline.

Product Specification

Accession	P02976
GeneID	3919448
Source	Escherichia coli.
Molecular Weight	Approximately 33.4 kDa, a single non-glycosylated polypeptide chain containing 296 amino acids.
Protein per Gram Powder Concentration for 1 unity OD at 280 nm	See Label.
Purity	4.48 mg/ml
Specificity	> 97 % by SDS-PAGE and HPLC analyses.
	The recombinant Protein A is a genetically engineered protein containing 5 IgG-binding regions of protein A. Cell wall binding

region, cell membrane binding region and albumin binding region have been removed from the recombinant Protein A to ensure the maximum specific IgG binding. The recombinant Protein A is ideal for purification of polyclonal or monoclonal IgG antibodies. Protein A binds to various human, mouse and rat IgG subclasses (e.g., human IgG1, IgG2, IgG4; mouse IgG2a, IgG2b, IgG3; rat IgG2c). It also binds to total IgG from rabbit, guinea pig, pig, dog and cat.

Physical Appearance Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation Lyophilized from additive free solution.

Endotoxin Less than 0.1 EU/ μ g of Protein A as determined by LAL method.

Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at -20 °C.