

Protein A-Cys, His

#R00010

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

MNAAQHDEAAQQNAFYQVLNMPNLNADQRNGFIQSL
KDDPSQSANVLGEAQKLND SQAPKADAQQNNFNKD
QQSAFYEILNMPNLNEAQRNGFIQSLKDDPSQSTNVL
GEAKKLNESQAPKADNNFNKEQQNAFYEILNMPNLN
EEQRNGFIQSLKDDPSQSANLLSEAKKLNESQAPKA
DNKFNKEQQNAFYEILHLPNLNEEQRNGFIQSLKDDP
SQSANLLAEAKKLND AQAPKADNKFNKEQQNAFYEIL
HLPNLTEEQRNGFIQSLKDDPSVSKEILAEAKKLNDA
QAPKEEDSLEHHHHHHHC

Reconstitution

Dissolve in distilled water or saline.

Product Specification

Accession	P02976
GeneID	3919448
Source	Escherichia coli.
Tags	His
Molecular Weight	Approximately 34.8 kDa with 6×His-tag and a Cys on C-terminus, a single non-glycosylated polypeptide chain containing 307 amino acids.
Protein per Gram Powder	See Label.
Concentration for 1 unity OD at 280 nm	4.589 mg/ml
Purity	> 96 % by SDS-PAGE and RP-HPLC analyses.
Specificity	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

Sterile Filtered White Lyophilized

Appearance	(freeze-dried) powder.
Formulation	Lyophilized from additive free solution.
Endotoxin	Less than 0.1 EU/μg of Protein A-Cys, His as determined by LAL method.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at -20 °C.