

## Protein A, His

#R00009

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  
QAPKEEDSLEHHHHHHH

### Reconstitution

Dissolve in distilled water or saline.

### Product Specification

|                                                                |                                                                                                                              |
|----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Accession                                                      | P02976                                                                                                                       |
| GeneID                                                         | 3919448                                                                                                                      |
| Source                                                         | Escherichia coli.                                                                                                            |
| Tags                                                           | His                                                                                                                          |
| Molecular Weight                                               | Approximately 34.7 kDa with 6×His-tag on C-terminus, a single non-glycosylated polypeptide chain containing 306 amino acids. |
| Protein per Gram Powder Concentration for 1 unity OD at 280 nm | See Label.<br>4.652 mg/ml                                                                                                    |
| Purity                                                         | > 97 % by SDS-PAGE and 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 Appearance** Sterile Filtered White lyophilized (freeze-dried) powder.

|                    |                                                                                              |
|--------------------|----------------------------------------------------------------------------------------------|
| <b>Formulation</b> | Lyophilized from additive free solution.                                                     |
| <b>Endotoxin</b>   | Less than 0.1 EU/μg of Protein A, His as determined by LAL method.                           |
| <b>Shipping</b>    | The product is shipped at ambient temperature. Upon receipt, store it immediately at -20 °C. |