# Recombinant Protein A, His

Catalog #: 1001-01 Lot #: See label



## **Description**

#### Molecular Weight:

Approximately 34.7 kDa with 6×His-tag on C-terminus, a single non-glycosylated polypeptide chain containing 306 amino acids.

#### Source:

Escherichia coli.

#### Quantity:

10mg/100mg/1g

#### Protein per Gram Powder:\*

See Label.

#### Concentration for 1 unity OD at 280 nm:

4.652 mg/ml

## **Specification**

#### **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

#### **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.

#### **Endotoxin Level:**

Less than 0.1 EU/µg of Protein A, His as determined by LAL method.

#### Formulation:

Lyophilized from additive free solution.

### **Usage Guide**

## 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.

#### **Reconstitution:**

Dissolve in distilled water or saline.

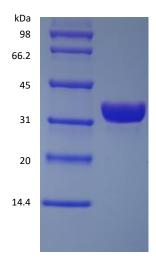
#### **Shipping:**

The product is shipped at ambient temperature. Upon receipt, store it immediately at -20  $^{\circ}$ C.

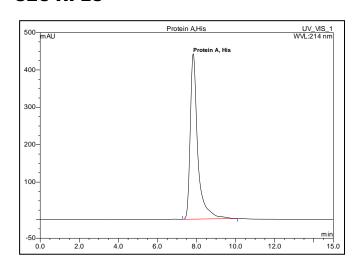
# **Background**

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.

## **SDS-PAGE**



# SEC-HPLC



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<sup>\*</sup>Masses of the protein and powder are not equal.