## Recombinant Protein A

Catalog #: 1001-05 Lot #: See label

# PrimeGene a biotechne brand

## **Description**

### Molecular Weight:

Approximately 33.4 kDa, a single non-glycosylated polypeptide chain containing 296 amino acids.

Source:

Escherichia coli.

Quantity:

10mg/100mg/1g

Protein per Gram Powder:\*

See Label.

Concentration for 1 unity OD at 280 nm:

4.48 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/ $\mu g$  of Protein A 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:**

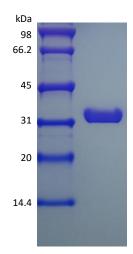
The product is shipped at ambient temperature. Upon receipt, store it immediately at -20  $^{\circ}\text{C}.$ 

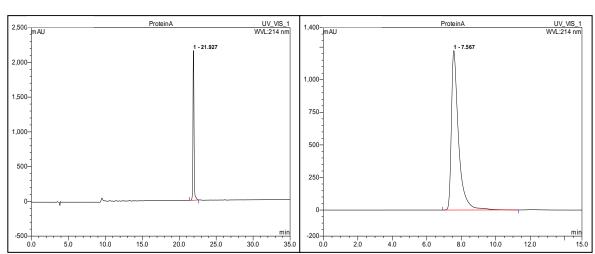
\*Masses of the protein and powder are not equal.

## **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 RP-HPLC SEC-HPLC





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