# Recombinant Cys-Protein A/G

Catalog #: 1003-03 Lot #: See label

# Description

## Molecular Weight:

Approximately 47.8 kDa with a Cys on N-terminus, a single non-glycosylated polypeptide chain containing 430 amino acids.

Source: Escherichia coli.

Quantity:

1mg/5mg/100mg/1g

Protein per Gram Powder:\*

See Label.

**Concentration for 1 unity OD at 280 nm:** 1.737 mg/ml

## **Specification**

## **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

## **Purity:**

> 96 % by SDS-PAGE and RP-HPLC analyses.

## Specificity:

The recombinant Protein A/G is a genetically engineered protein containing 5 IgG-binding regions of protein A and 2 of protein G. Cell wall binding region, cell membrane binding region and albumin binding region have been removed from the recombinant Protein A/G to ensure the maximum specific IgG binding. The recombinant

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Protein A/G is ideal for purification of polyclonal or monoclonal IgG antibodies. Protein A/G binds to various human, mouse and rat IgG subclasses (e.g., human IgG1, IgG2, IgG3, IgG4; mouse IgG2a, IgG2b, IgG3; rat IgG2a, IgG2c). It also binds to total IgG from cow, goat, sheep, house, rabbit, guinea pig, pig, dog and cat.

## Endotoxin Level:

Less than 0.1 EU/µg of Cys-Protein A/G 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:

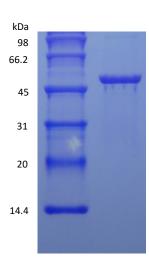
The product is shipped at ambient temperature. Upon receipt, store it immediately at -20 °C.

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

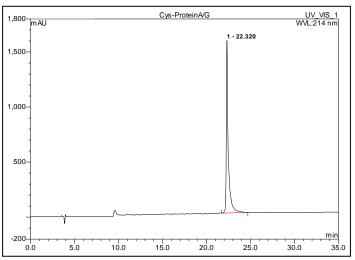
# Background

SDS-PAGE

The recombinant Protein A/G consists of 7 IgG-binding domains EDABC-C1C3, which corresponds to the Protein A and G domains that are included in the recombinant sequence. The Protein A portion is from Staphylococcus aureus segments E, D, A, B and C. The Protein G portion is from Streptococcus segments C1 and C3. The binding capacity of recombinant Protein A/G is broader than either Protein A or Protein G alone.



# **RP-HPLC**



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