abcam

Product datasheet

Recombinant Protein G ab49807

5 References 1 Image

Description

Product name	Recombinant Protein G
Purity	> 95 % SDS-PAGE. >98% by SDS-PAGE and HPLC analyses. The albumin binding domain as well as cell wall and cell membrane binding domains have been removed to ensure the maximum specific IgG binding capacity.
Expression system	Escherichia coli
Accession	P19909
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Streptococcus
Sequence	LDKYGVSDYHKNLINNAKTVEGVKDLQAQVVESAKKARIS EATDGLSDFL KSQTPAEDTVKSIELAEAKVLANRELDKYGVSDYYKNLINN AKTVEGVKA LIDEILAALPKTDTYKLILNGKTLKGETTTEAVDAATAEKVFK QYANDNG VDGE
Predicted molecular weight	26 kDa including tags
Amino acids	190 to 384
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab49807** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Affinity Purification
Form	Lyophilized
Additional notes	This product is manufactured by BioVision, an Abcam company and was previously called 6510 Protein G. 6510-1 is the same size as the 1 mg size of ab49807. Protein G can be used to detect, quantify and purify IgG antibodies and antibody/antigen

complexes. The 6-His-tag on N-terminus can be used for affinity purification or protein G detection using anti-His-tag antibodies.

This protein contains only IgG binding domains.

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 7.40
Constituents: 10.269% Trehalose, 0.727% Dibasic monohydrogen potassium phosphate, 0.248% Monobasic dihydrogen potassium phosphate

General Info

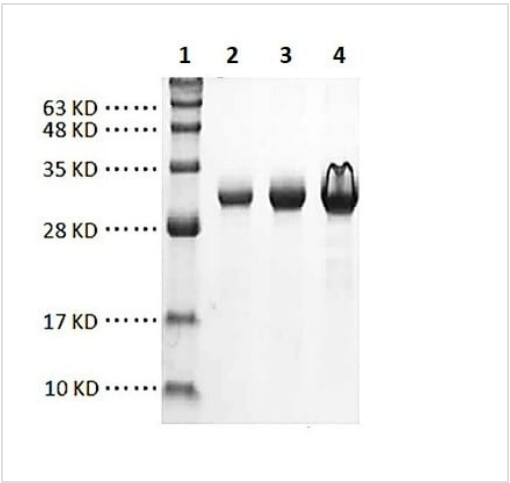
Relevance

Protein G is a bacterial protein derived from the cell wall of certain strains of b-hemolytic Streptococccci. It binds with high affinity to the Fc portion of various classes and subclasses of immunoglobulins from a variety of species. Protein G binds to all IgG subclasses from human, mouse and rat species. It also binds to total IgG from guinea pig, rabbit, goat, cow, sheep, and horse. Protein G binds preferentially to the Fc portion of IgG, but can also bind to the Fab region, making it useful for purification of F(ab') fragments of IgG. Due to it's affinity for the Fc region of many mammalian immunoglobulins, protein G is considered a universal reagent in biochemistry and immunology.

Cellular localization

Cell Wall and Secreted

Images



SDS-PAGE - Recombinant Protein G (ab49807)

Different amounts of Recombinant Protein G loaded under reducing conditions and stained with Coomassie Blue. The protein has a predicted molecular weight (MW) of □ 26.1 kDa. However it runs larger on a SDS-PAGE gel. SDS-PAGE (12%) of Recombinant Protein G:

Lane 1: MW Marker
Lane 2 : Protein G (2.2 µg)
Lane 3 : Protein G (4.4 µg)
Lane 4 : Protein G (8.8 µg)

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet

- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors