

Protein A/G

#R00020

Size: 1 mg/25 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

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.

AA Sequence

NAAQHDEAQQNAFYQVLNMPNLNADQQRNGFIQSLK
DDPSQSANVLGEAQKLND SQAPKADAQQNNFNKDQ
QSAFYEILNMPNLNEAQRNGFIQSLKDDPSQSTNVLG
EAKKLNESQAPKADNNFNKEQQNAFYEILNMPNLNE
EQRNGFIQSLKDDPSQSANLLSEAKKLNESQAPKAD
NKFNKEQQNAFYEILHLPNLNEEQRNGFIQSLKDDPS
QSANLLAEAKKLND AQAPKADNKFNKEQQNAFYEIL
HLPNLTEEQRNGFIQSLKDDPSVSKEILAEAKKLNDA

QAPKEEDSLEGSGSGTYKLILNGKTLKGETTTEAVDA
ATAEKVFKQYANDNGVDGEWYDDATKTFTVTEKPE
VIDASELTPAVTTYKLIVINGKTLKGETTTKAVDAETAEK
AFKQYANDNGVDGVWYDDATKTFTVTE

Reconstitution

Dissolve in distilled water or saline.

Product Specification

Source	Escherichia coli.
Molecular Weight	Approximately 47.7 kD, a single non-glycosylated polypeptide chain containing 429 amino acids.
Protein per Gram Powder	See Label.
Concentration for 1 unity OD at 280 nm	1.741 mg/ml
Purity	> 97 % by SDS-PAGE and 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 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.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from additive free

Endotoxin	solution. Less than 0.1 EU/μg of Protein A/G as determined by LAL method.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at -20 °C.