

Protein A/G, His

#R00019

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 8 IgG-binding domains EDABC-C1C2C3, 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, C2 and C3. The binding capacity of recombinant Protein A/G is broader than either Protein A or Protein G alone.

AA Sequence

MNAAQHDEAQQNAFYQVLNMPNLNADQRNGFIQSL
KDDPSQSANVLGEAQKLND SQAPKADAQQNNFNKD
QQSAFYEILNMPNLNEAQRNGFIQSLKDDPSQSTNVL
GEAKKLNESQAPKADNNFNKEQQNAFYEILNMPNLN
EEQRNGFIQSLKDDPSQSANLLSEAKKLNESQAPKA
DNKFNKEQQNAFYEILHLPNLNEEQRNGFIQSLKDDP
SQSANLLAEAKKLND AQAPKADNKFNKEQQNAFYEIL

HLPNLTEEQRNGFIQSLKDDPSVSKEILAEAKKLNDA
QAPKEEDSLEGSGSGTYKLILNGKTLKGETTTEAVDA
ATAEKVFKQYANDNGVDGEWYDDATKTFTVTEKPE
VIDASELTPAVTTYKLINGKTLKGETTTEAVDAATAEK
VFKQYANDNGVDGEWYDDATKTFTVTEKPEVIDAS
ELTPAVTTYKLINGKTLKGETTTKAVDAETA EKAFKQ
YANDNGVDGVWYDDATKTFTVTEKLAAA LEHHHHH
H

Reconstitution

Dissolve in distilled water or saline.

Product Specification

Source	Escherichia coli.
Tags	His
Molecular Weight	Approximately 56.9 kDa with 6×His-tag on C-terminus, a single non-glycosylated polypeptide chain containing 513 amino acids.
Protein per Gram Powder	See Label.
Concentration for 1 unity OD at 280 nm	1.523 mg/ml
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 3 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 solution.
Endotoxin	Less than 0.1 EU/μg of Protein A/G, His as determined by LAL method.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at -20 °C.