

32-4506: Recombinant Protein A/G

Description

Source : Escherichia coli. The recombinant Protein A/G consists of 7 IgG-binding domains EDABC-C2C3, 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 C2 and C3. The fusion protein has a predicted molecular mass of 50.5 kDa. But it migrates with an apparent molecular mass of approximately 45kDa in SDS-PAGE. Recombinant Protein A/G fusion protein joins IgG binding domains of both Protein A and Protein G. Protein A/G includes four Fc binding domains from Protein A and two from Protein G, yielding a final mass of 50.4 kDa. The binding dependency to pH of Protein A/G lower than Protein A, but has the additive properties of Protein A and G together. Protein A/G binds to all subclasses of human IgG, making it helpful for purifying polyclonal or monoclonal IgG antibodies whose subclasses have not been identified. Protein A/G binds to IgA, IgE, IgM and IgD. Protein A/G binds to all subclasses of mouse IgG excluding mouse IgA, IgM or serum albumin. This permits Protein A/G to be used in purification and detection of mouse monoclonal IgG antibodies, with no interference from IgA, IgM and serum albumin. Mouse monoclonal antibodies normally have a stronger affinity to the chimeric Protein A/G than to either Protein A or Protein G. Protein A/G also has been used for purification of macaque IgG.

Product Info

Amount :	10 mg
Purification :	>95% as determined by SDS-PAGE and RP-HPLC.
Content :	Lyophilized white Powder containing no additives.
Storage condition :	After reconstitution, aliquot and store at -20°C. Avoid repeated freeze/thaw cycles.
Amino Acid :	NAAQHDEAQQ NAFYQVLNMP NLNADQRNGF IQSLKDDPSQ SANVLGEAQK LNDSQAPKAD AQQNNFNKDQ QSAFYEILNM PNLNEAQRNG FIQSLKDDPS QSTNVLGEAK KLNESQAPKA DNNFNKEQQN AFYEILNMPN LNEEQRNGFI QSLKDDPSQS ANLLSEAKKL NESQAPKADN KFNKEQQNAF YEILHLPNLN EEQRNGFIQS LKDDPSQSAN LLAEAKKLND AQAPKADNKF NKEQQNAFYE ILHLPNLTEE QRNGFIQSLK DDPSVSKEIL AEAKKLNDQA APKEEDSLEG SGSGTYKLIL NGKTLKGETT TEAVDAATAE KVFKQYANDN GVDGEWYDD ATKFTVTEK PEVIDASELT PAVTTYKLVI NGKTLKGETT TKAVDAETAE KAFKQYANDN GVDGVWYDD ATKFTVTE.

Application Note

It is recommended to reconstitute the lyophilized Protein-A/G in sterile 18M-cm H₂O not less than 0.1mg/ml, which can then be further diluted to other aqueous solutions.