



Adar's Protein G

Cat. 1042-10/50/250

Immunoglobulins affinity-purification

ver. 1.2

Introduction

Recombinant Protein-G used also in Adar's Protein G beads (Cat 1017) is a genetically engineered form of Protein-G. Non-essential regions have been removed while leaving the IgG binding sites intact.

Protein G has been extensively used for the isolation of IgG from several species of mammals. However, the interaction between Protein G and IgG is not equivalent for all IgG subclasses. Despite its variable binding characteristics, Protein-G possesses properties that makes it a popular choice for the antibodies isolation. Protein G acts by binding the F_c region of immunoglobulins. As only the F_c region is involved in binding to Protein G, the F_{ab} region is available for binding antigen. Hence, Protein G is extremely useful for isolating of immune complexes.

Protein G Beads characteristics

Source: recombinant protein, Molecular Weight 33 kd expressed in *E. coli*

Purity: > 90% by SDS-PAGE.

Spectroscopic analysis: OD_{280nm}/250nm=2.51

LAL Pyrogenicity: < 0.5 EU/mg Recombinant Protein G

Composition: Lyophilized white Powder. 10.6 mg Recombinant Protein G, 0.78 mg phosphate buffer salts.

Storage before reconstitution: Store at 4°C. Product is stable under these conditions for two years.

Reconstitution: Reconstitution per 10 mg vial with 0.48 mL of deionized water will give a solution containing 22.1 mg/ml Recombinant Protein G in 10 mM Phosphate buffer, pH 7.4

Storage after reconstitution: Store at 4°C in PBS pH 7.4 added with NaN₃ 0.1% (w/v) as a preservative. Product is stable under these conditions for 1 month. Alternatively, Prepare small aliquots and store at -20°C for up to two years. Avoid repeated freezing and thawing cycles.