Technical Data Sheet

Streptococcus Protein G (r-SPG)

General Information

Catalog Number: A06S

Formulation: The product is lyophilized from a sterile solution of protein in 5 mM PB, pH 7.4.

Mol. Wt.: 28 kDa

Theory pI: 4.79

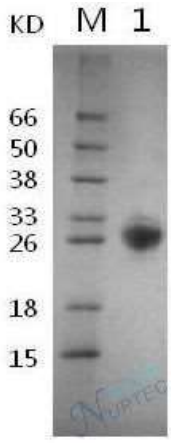
Resources: *Escherichia coli (E. coli)*

Purity: ⩾90% by SDS-PAGE analysis

Product is stable for up to three years from date of receipt at -20°C to -80°C.
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Description

Protein G is a bacterial cell wall protein expressing at the cell surface of some group C and group G *Streptococcal* strains that binds the Fc region of immunoglobulin G (IgG) with high affinity. Protein G binds to all IgG subclasses from human, mouse and rat species. It also binds to IgGs from guinea pig, rabbit, goat, cow, sheep, and horse. Protein G shows a broader range of binding to IgG subclasses than does staphylococcal protein A.
Some of the most important application areas for protein G are the isolation and purification or the removal of IgG from serum, the purification of monoclonal antibodies, and the isolation of immune complexes. Protein G conjugates is commonly used as affinity adsorbents to purify immunoglobulins (antibodies) and immunoglobulin subtypes from serum, hybridoma ascites, tissue culture supernatants and other biological fluids.
In addition to the Fc receptor, intact protein G has membrane spanning regions as well as specific binding sites for albumin and for the Fab region of immunoglobins. The albumin and cell surface binding domains have been eliminated from recombinant protein G to ensure the maximum specific IgG binding capacity.



M: Protein marker standard

Lane 1: r-SPG

Notes:

It is recommended that the product is reconstituted with sterile water into a final concentration of 10 mg/ml freshly.

Research use only or for further manufacturing