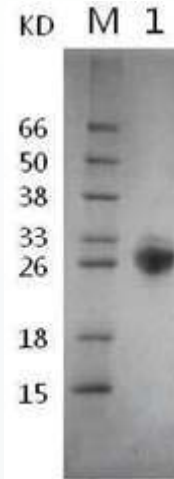


## Recombinant Streptococcus Protein G (r-SPG)

|                        |   |                                      |
|------------------------|---|--------------------------------------|
| <b>Catalog No.</b>     | ■ | LT12007                              |
| <b>Packing Details</b> | ■ | 10 mg                                |
| <b>Formulation</b>     | ■ | Lyophilized from 5 mM PBS at pH 7.4. |
| <b>Mol. Wt.</b>        | ■ | 28 kDa                               |
| <b>Resources</b>       | ■ | Escherichia coli (E. coli)           |
| <b>Purity</b>          | ■ | ≥90% by SDS-PAGE analysis            |
| <b>Storage</b>         | ■ | -20°C                                |
| <b>Shelf Life</b>      | ■ | 3 years                              |



M: Protein marker standard  
**Lane 1: r-SPG**

### Description

Protein G is found in bacterial cell walls. It is expressed on the surfaces of some group C and group G Streptococcal strains, where it binds the Fc region of immunoglobulin G (IgG). Protein G binds to all types of IgG found in humans, mice, and rats. It also binds to many IgGs from guinea pigs, rabbits, goats, cows, sheep, and horses. Protein G can bind to more IgG subclasses than staphylococcal protein A.

Some of the most important applications of protein G involve the purification of monoclonal antibodies, and the isolation of immune complexes, and the isolation, purification, removal of IgG from serum. Protein G conjugates are often used as affinity adsorbents in the purification of 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 and binding sites specific to albumin and the Fab region of immunoglobins. The albumin and cell surface binding domains have been removed from recombinant protein G to ensure the maximum specific IgG binding capacity.

### Notes

*It is recommended that the product be reconstituted with sterile water into a final concentration of 10 mg/ml. Avoid multiple freeze-thaw cycles and exposure to frequent changes in temperature.*

*The use of strong acids and bases, strong oxidants, and high concentrations of organic solvents should be avoided to prevent denaturation.*

**For research use only!**