

# Recombinant Cys-Protein G

Catalog # FL108

## Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 95% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/μg of Cys-Protein G protein as determined by LAL method.
Expression System	Expressed in E. coli.
Tag	Tag free.
Concentration for 1 unity DO at 280 nm	0.729mg/ml
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PB, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	P19909 Leu298-Glu495 with an N-terminal Cys
Amino acid sequence	CLPKTDTYKLLNGKTLKGETTTEAVDAATAEKVFKQYANDNGVDGEWTYDDATKTFTVTEKPEVIDASELTPAVTTYKLVINGKTLKGETTTEAVDAATAEKVFKQYANDNGVDGEWTYDDATKTFTVTEKPEVIDASELTPAVTTYKLVINGKTLKGETT TKAVDAETA EKAFKQYANDNGVDGVWVWYDDATKTFTVTE
Molecular weight	Approximately 21.9 kDa, and it migrates with an apparent molecular mass of 40 kDa in SDS-PAGE.
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°C. Please avoid repeated freeze-thaw cycles after reconstitution. 36 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.
Precautions	Recombinant Cys-Protein G is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

Protein G is a bacterial protein derived from the cell wall of certain strains of β-hemolytic Streptococcus. It binds with high affinity to the Fc portion of various classes and subclasses of immunoglobulins from a variety of species. Protein G binds to all IgG subclasses from human, mouse and rat species. It also binds to total IgG from guinea pig, rabbit, goat, cow, sheep, and horse. Protein G binds preferentially to the Fc portion of IgG, but can also bind to the Fab region, making it useful for purification of F(ab') fragments of IgG. Due to its affinity for the Fc region of many mammalian immunoglobulins, protein G is considered a universal reagent in biochemistry and immunology. Recombinant Cys-Protein G is a single non-glycosylated polypeptide chain containing 201 amino acids, and there is an N-terminal cysteine for Site-Specific Conjugation.

