

Datasheet for PG00-00**Protein G****Overview**

Description:	Protein G - PG00-00
Item No.:	PG00-00
Size:	1 mg
Applications:	Other
Origin:	Streptococcus sp.

Product Details

Background:	Protein G is a surface protein of two groups of Streptococcal bacteria that has the ability to bind immunoglobulins. Similar to Protein A, but with slightly different specificity, Protein G is an important agent in the purification of proteins due to its ability to bind the Fc region. While native Protein G binds to albumin, recombinant Protein G is designed to contain only immunoglobulin binding domains to ensure the maximum specific IgG binding capacity.
Synonyms:	ProG, Streptococcus G protein
Species of Origin:	Streptococcus sp.

Target Details

Purity/Specificity:	Recombinant Protein G is chromatographically pure and shows predominantly a single band by SDS-PAGE. Protein G was assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Protein G. No reaction was observed against anti-Protein A.
Relevant Links:	• UniProtKB - P19909 • PG00-00 SDS

Application Details

Suggested Applications:	Other (Based on references)
Application Note:	Protein G is suitable for use as an antigen, as a control or standard in assays, for conjugation and for most other immunological methods. Protein G contains only IgG binding domains, ensuring maximum specific IgG binding.

Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
WB:	User Optimized

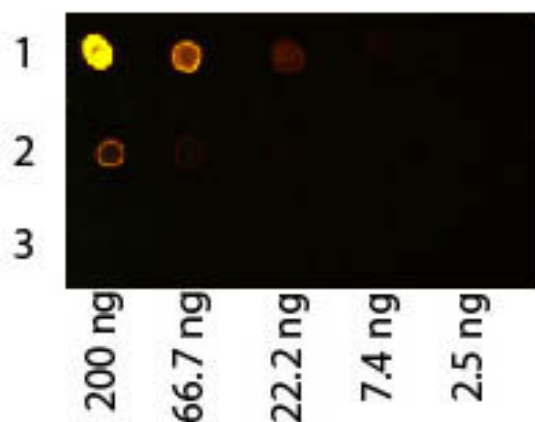
Formulation

Physical State:	Lyophilized
Concentration:	1 mg/mL by UV absorbance at 280 nm
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Protein G is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Dot Blot

Dot Blot of Protein G. Antigen 1: Human IgG (p/n 009-0102). Antigen 2: Rat IgG (012-0102). Antigen 3: Dog IgG (p/n 004-0102). Load: Starting dilution is 200 ng followed by a 3-fold serial dilution. Primary antibody: Protein G at 1:1000 for 60 min RT. Secondary antibody: Fluorescein rabbit anti-Protein G (p/n 200-402-138) at 1:1,000 for 30 min at RT. Block: MB-070 for 30 min at RT.

References

- Yang, H. et al. Binding site on human immunoglobulin G for the affinity ligand HWRGWV. *Journal of Molecular Recognition : Jmr* (2010)

Disclaimer

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