

Datasheet for PG50-00-0002

Sepharose™ Protein G**Overview**

Description:	Sepharose™ Protein G - PG50-00-0002
Item No.:	PG50-00-0002
Size:	2 mL
Applications:	IP
Origin:	Streptococcus sp.

Product Details

Background:	Protein G is prepared by covalently coupling recombinant Protein G to 6% crosslinked sepharose beads. The coupling technique is optimized to give a high binding capacity for IgG, resulting in IgG binding greater than 10 mg of human IgG per cc of slurry. Protein G is used for immunoprecipitation and purification of monoclonal and polyclonal antibodies. This product shows stability within pH range of 2 to 10, is high flow rate capable, and has low falling off of rProtein G.
Synonyms:	ProG, Streptococcus G protein, Sepharose Protein G
Species of Origin:	Streptococcus sp.
Conjugate:	Sepharose™
Type:	Recombinant Protein
Specific Activity:	greater than 20mg/ml human IgG bound per CC Sepharose

Target Details

Purity/Specificity:	Sepharose™ Protein G binds to all IgG subclasses from human, monkey, mouse and rat species. It also binds to total IgG from guinea pig, rabbit, goat, cow, sheep, and horse.
Relevant Links:	• UniProtKB - P19909 • protocol

Application Details

Suggested Applications:	IP (Based on references)
Application Note:	Protein G resin may also be used to pull down antibody:antigen complexes in immunoprecipitation experiments. This product is suitable for use at 20 µL per immunoprecipitation reaction.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IP:	User Optimized
Other:	DOE: 30JUN2024

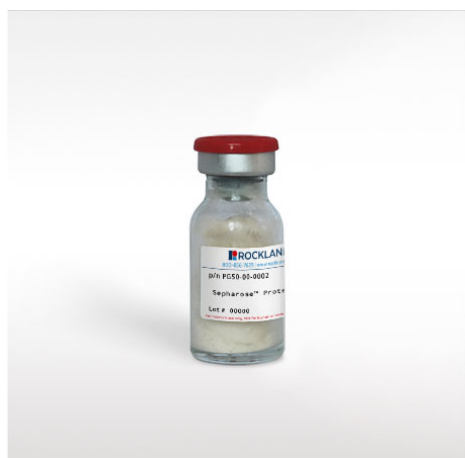
Formulation

Physical State:	Suspension of agarose beads
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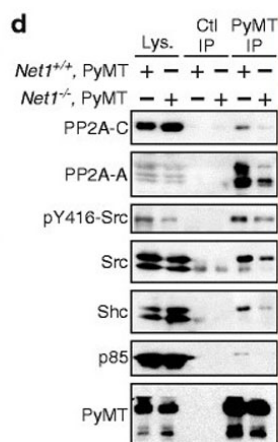
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store SEPHAROSE PROTEIN G at 4° C prior to opening. DO NOT FREEZE. Supplied in 20% Ethanol/Water
Expiration:	Expiration date is one (1) year from date of receipt.

Images

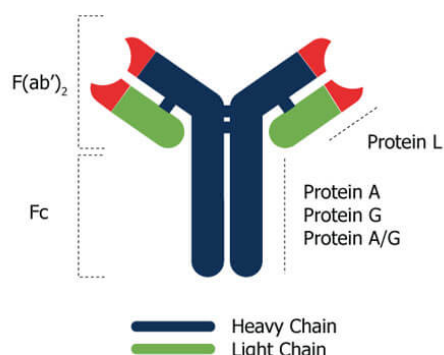


Bottle
 Sepharose™ Protein G



Immunoprecipitation

Net1 deletion inhibits PyMT-dependent ERK1/2 and Akt1 activation. d Western blot analysis of proteins coimmunoprecipitating with PyMT from tumors of genotypes shown. Representative experiment from four independent experiments. Net1 neuroepithelial transforming gene 1, PP2A protein phosphatase 2A, PyMT polyoma middle T antigen, Shc Src homology domain 2 containing, Src SRC proto-oncogene, non-receptor tyrosine kinase. Fig 5. PMID: 29769144.



Figure

Antibody-binding protein specificity for Protein A, Protein G, and Protein A/G which demonstrate binding specificity to IgG immunoglobulin through an interaction in the Fc region of the heavy chain domain. Protein A and G each show some preferences to certain types of antibody subclasses, and proper reagent selection may be required, Protein A/G offers the widest range of antibody subclass binding. Another immunoglobulin binding protein is Protein L which binds to the kappa light chain of the F(ab')₂ region.

References

- Cacho-Navas C et al. ICAM-1 nanoclusters regulate hepatic epithelial cell polarity by leukocyte adhesion-independent control of apical actomyosin. *Elife*. (2024)
- Zuo, Y et al. Contributions of the RhoA guanine nucleotide exchange factor Net1 to polyoma middle T antigen-mediated mammary gland tumorigenesis and metastasis. *Breast Cancer Research : Bcr* (2018)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.