

Datasheet for 200-1177**Protein A Antibody****Overview**

Description:	Anti-Protein A (GOAT) Antibody (BULK ORDER) - 200-1177
Item No.:	200-1177
Size:	50 mg
Applications:	WB, IF
Host Species:	Goat

Product Details

Background:	Protein A is a cell wall protein originating from the bacterium <i>Staphylococcus aureus</i> . Protein A binds to immunoglobulins through interaction with the IgG heavy chain within the Fc region. Affinity to Fc may vary depending on IgG species origins or subclasses. Protein A is predicted 42kDa based on sedimentation data and observed to run ~55-56kDa on SDS-Page. Protein A is commonly used in bioprocessing and bioseparations.
Synonyms:	goat anti-Protein A Antibody, goat anti Protein A, goat anti PA
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Immunogen Type:	Native Protein
Immunogen:	Protein A [<i>Staphylococcus aureus</i>]
Purity/Specificity:	Protein A Antibody is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against purified and partially purified Protein A [<i>Staphylococcus aureus</i>] and anti-Goat Serum. Cross reactivity against Protein A from other sources is unknown.

Application Details

Tested Applications:	WB
Suggested Applications:	IF (Based on references)
Application Note:	Protein A Antibody has been tested by western blot and is suitable for immunoprecipitation, immunodiffusion, conjugation and most immunological methods requiring high titer and specificity. Optimal concentration in immunoassays should be determined by the researcher.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000 - 1:100,000
IHC:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

Formulation

Physical State:	Lyophilized
Concentration:	10.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None
Reconstitution Volume:	5.0 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. This product 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

Immunofluorescence Microscopy

Molecular targeting of *S. aureus* with fluorescent dyes and siMNPs functionalized with anti-Spa and anti-Lpp Abs.

(a–c) Optical (a) and fluorescence images of bacteria targeted with FITC-labeled anti-Spa Abs (green, b) or phycoerythrin (PE)-labeled anti-Lpp (SA0486) Abs (red, c). (d) Overlaid image that confirms co-localization of Abs. Green and red arrows indicate Spa-positive and Lpp-positive bacteria, respectively, and the white arrow indicates a rare unlabeled bacterium. Scale bars, 5 μm .

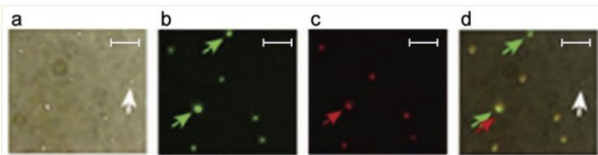
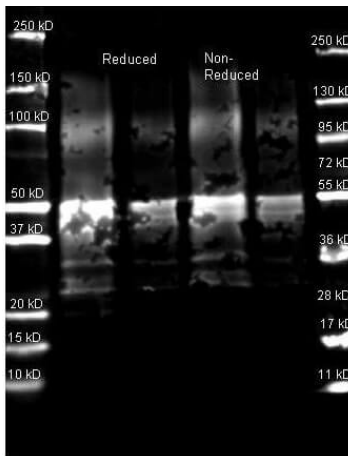


Fig 5. PMID: 23049814

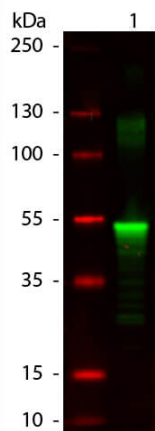
Western Blot

Western Blot of Goat anti-Protein A Antibody. Lane 1: Protein A Reduced. Lane 2: Protein A Reduced. Lane 3: Protein A Non-Reduced. Lane 4: Protein A Non-Reduced. Load: Lane 1 and 3 - 1.0 μg per lane, Lane 2 and 4 - 0.25 μg per lane. Primary antibody: Protein A antibody at 1:5,000 for overnight at 4°C. Secondary antibody: DyLight™ 649 goat secondary antibody at 1:10,000 for 90 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~42kDa/~50 kDa for Protein A. Other band(s): Protein A splice variants and isoforms.



Western Blot

Western Blot of Goat anti-Protein A Antibody. Lane 1: Protein A. Lane 2: None. Load: 50 ng per lane. Primary antibody: Protein A antibody at 1:1,000 overnight at 4°C. Secondary antibody: IRDye800® goat secondary antibody at 1:20,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 43 kDa, 53 kDa for Protein A. Other band(s): Protein A splice variants and isoforms.



References

- Galanzha, El et al. In vivo magnetic enrichment, photoacoustic diagnosis, and photothermal purging of infected blood using multifunctional gold and magnetic nanoparticles. *PLoS One* (2012)

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.