

Datasheet for 200-101-077S**Protein A Antibody****Overview**

Description:	Anti-Protein A (GOAT) Antibody - 200-101-077S
Item No.:	200-101-077S
Size:	25 µL
Applications:	WB, IF
Reactivity:	Protein A
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

Reactivity:	Protein A
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:	Anti-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
IP:	1:1,000 - 1:5,000
WB:	1:2,000 - 1:10,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 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

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is three (3) months 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 μ m.

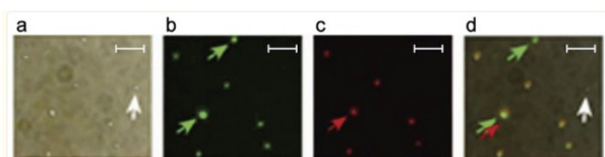
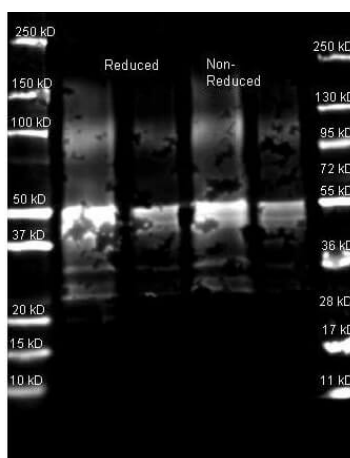
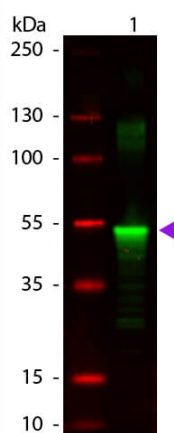


Fig 5. PMID: 23049814



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 μ g per lane, Lane 2 and 4 - 0.25 μ g 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

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