

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

|                      |                                              |
|----------------------|----------------------------------------------|
| <b>Description:</b>  | Anti-Protein A (GOAT) Antibody - 200-101-077 |
| <b>Item No.:</b>     | 200-101-077                                  |
| <b>Size:</b>         | 100 µg                                       |
| <b>Applications:</b> | WB, IF                                       |
| <b>Reactivity:</b>   | Protein A                                    |
| <b>Host Species:</b> | Goat                                         |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | 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. |
| <b>Synonyms:</b>     | goat anti-Protein A Antibody, goat anti Protein A, goat anti PA                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host Species:</b> | Goat                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Clonality:</b>    | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Format:</b>       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Target Details**

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity:</b>         | Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen Type:</b>     | Native Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Immunogen:</b>          | Protein A [ <i>Staphylococcus aureus</i> ]                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity/Specificity:</b> | 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

|                                |                                                                                                                                                                                                                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b>    | WB                                                                                                                                                                                                                                                                               |
| <b>Suggested Applications:</b> | IF (Based on references)                                                                                                                                                                                                                                                         |
| <b>Application Note:</b>       | 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. |
| <b>Assay Dilutions:</b>        | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                                                                                  |
| <b>ELISA:</b>                  | 1:20,000 - 1:100,000                                                                                                                                                                                                                                                             |
| <b>IP:</b>                     | 1:1,000 - 1:5,000                                                                                                                                                                                                                                                                |
| <b>WB:</b>                     | 1:2,000 - 1:10,000                                                                                                                                                                                                                                                               |

## Formulation

|                        |                                                            |
|------------------------|------------------------------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)                                  |
| <b>Concentration:</b>  | 1.0 mg/mL by UV absorbance at 280 nm                       |
| <b>Buffer:</b>         | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b>   | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>     | None                                                       |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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. |
| <b>Expiration:</b>         | 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  $\mu$ m.

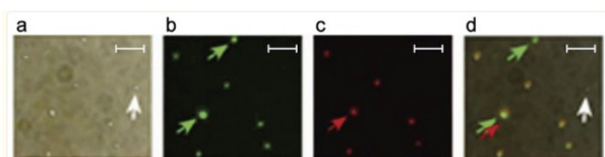
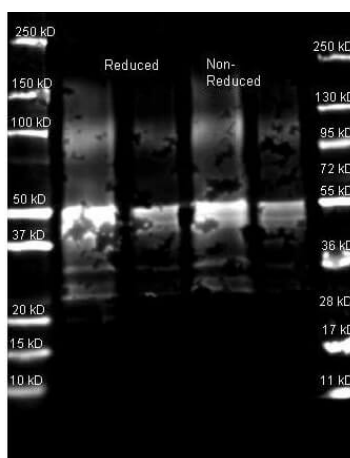
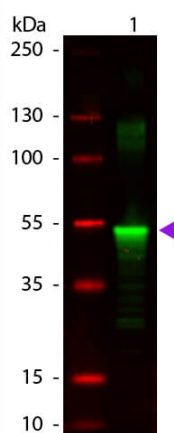


Fig 5. PMID: 23049814



### 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  $\mu$ g per lane, Lane 2 and 4 - 0.25  $\mu$ 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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