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Datasheet for 200-901-077S

Protein A Antibody

Overview

Description:	Anti-Protein A (CHICKEN) Antibody - 200-901-077S
Item No.:	200-901-077S
Size:	25 µL
Applications:	Dot Blot, WB, IF
Reactivity:	Protein A
Host Species:	Chicken

Product Details

Background:	Protein A is a cell wall protein originating from the bacterium Staphylococcus aureus. 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.
Synonyms:	chicken anti-Protein A Antibody, chicken anti Protein A, chicken anti PA
Host Species:	Chicken
Clonality:	Polyclonal
Format:	IgY

Target Details

Reactivity:	Protein A
Immunogen Type:	Native Protein
Immunogen:	This IgY fraction antibody was prepared from eggs of chickens laid after repeated immunizations with Protein A [Staphylococcus aureus].
Purity/Specificity:	This Anti-Protein A Antibody is an IgY fraction antibody purified from monospecific chicken egg yolks by a multi-step process which includes selective precipitation and salt fractionation 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 [Staphylococcus aureus] and anti-Chicken Serum. Cross reactivity against Protein A from other sources is unknown.

Application Details

Tested Applications:	Dot Blot, WB
Suggested Applications:	IF (Based on references)
Application Note:	Anti-PROTEIN A (CHICKEN) Antibody has been tested by western blotting and suitable for ELISA. Although not tested, this antibody may also be useful for neutralization assays, immunohistochemistry, flow Cytometry, immunoprecipitation, immunodiffusion, conjugation and most immunological methods requiring high titer and specificity.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:500 - 1:2,000
WB:	1:500 - 1:2,000

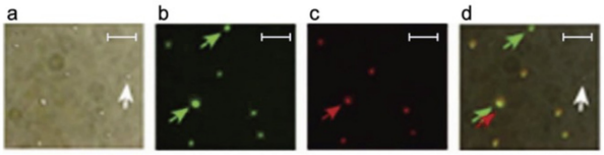
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 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 one (1) year from date of receipt.

Images



Immunofluorescence Microscopy
(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

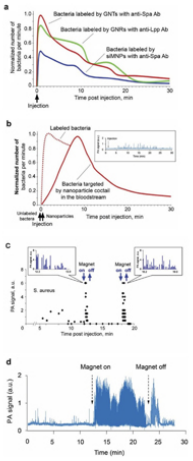
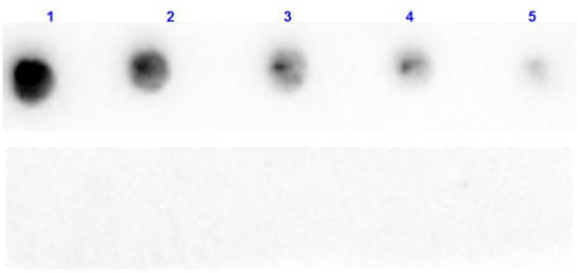


Figure
(a) In vivo PA monitoring of CBCs labeled with Ab-functionalized NPs in vitro prior to injection. (b) PA monitoring of CBCs labeled in vivo with a cocktail of functionalized NPs consisting of GNRs690 with anti-Lpp Ab and GNRs900 with anti-Spa Ab in a 50%?50% proportion in 20 µL of phosphate-buffered saline (n = 3). The inset shows typical PA signal traces. Dashed line indicates PA monitoring observed when the same cocktail was used to label S. aureus cells in vitro prior to injection (similar to Fig. 7a). The average standard deviation for each time point in (a) and (b) is 18% (c) Verification of magnetic amplification of PA signals from bacteria labeled with 30-nm MNPs with anti-Spa Ab in rat mesentery. The inset shows typical PA signal traces. (d) In vivo real-time monitoring of PA signal dynamic from bacteria labeled in vivo by siMNPs with anti-Spa Ab before, during, and after magnetic field action in mouse ear. Laser parameters: wavelengths, 671 nm and 820 nm (a, b), 639 nm (c), 671 nm (d); energy fluence, 0.1 J/cm2. Fig 7.
PMID: 23049814



Dot Blot
Dot Blot of Chicken Anti-Protein A Antibody. Dilutions of Protein A: (1) 100ng, (2) 33.3ng, (3) 11.1ng, (4) 3.7ng, and (5) 1.23ng. Top Blot incubated with Primary Antibody: 1µg/mL of Anti-Protein A Antibody for 1 hour at room temp. Bottom Blot incubated with Secondary Only: Rabbit Fab2 anti-Chicken Peroxidase conjugated (p/n 703-403-002) 1:40,000 for 30 min at room temp. Blocking Buffer: BlockOut Universal Blocker (p/n MB-073). Exposure 7 sec.

References

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

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