Staphylococcal Protein A

Background

Protein A is a surface protein of *S. aureus* which binds IgG molecules by their Fc region. In serum, the bacteria will bind IgG molecules in the wrong orientation on their surface, which hinders opsonization and phagocytosis. Mutants of *S. aureus* lacking protein A are more efficiently phagocytosed in vitro and mutants in infection models have diminished virulence. Due to its affinity for the Fc region of many mammalian immunoglobulins, protein A is considered a universal reagent in biochemistry and immunology.

Immunogen

Purified, recombinant Protein A from GE Healthcare, product number 17-0872

Host

Chicken

Clonality

Polyclonal

Purity

Affinity purified IgY.

Format

Liquid in 0.9% NaCl, 0.1% sodium azide. pH 7.2

Quantity

100 µl (1 mg/ml)

Storage

Store at 4°C; make aliquots to avoid working with a stock. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from liquid material adhering to the cap or sides of the tubes.

Tested applications

Affinity purified IgY

Related products

IMS02-109-334 | anti-Streptococcal Protein G
IMS02-136-331 | anti-Peptostreptococcus magnus Protein L
AS15 2849 | Staphylococcus aureus
Secondary antibodies

Additional information

The IgY fraction is isolated by a two-step PEG precipitation procedure followed by ammonium sulphate precipitation.

This antibody can be used as capture and detection antibody in ELISA. as a detection ab, a dilution 1:2000 and can detect Protein A below 1ng/ml or 1ppm (where ppm is the concentration of Protein A relative to the concentration of IgG, e.g. 1 ng/mL Protein A in 1mg/mL of IgG equals 1 ppm).

This antibody is detecting both recombinant and native Protein A.

Application information

Recommended dilution

1 : 500 as a capture antibody (ELISA), 1 : 2000 as a detection antibody (ELISA), 1 : 1000 (WB)

Expected | apparent MW

55 | 47 kDa

Confirmed reactivity

*Staphylococcus aureus*

Predicted reactivity

*Staphylococcus aureus*

Not reactive in

No confirmed exceptions from predicted reactivity are currently known.

Additional information

One precipitation arc in immunodiffusion against Staphylococcal Protein A.