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## Protein A / RBITC

Catalog Number: bsR-0362P

Concentration: 1.0 mg/ml

AA Seq: Purified native protein

Activity: Not tested

Endotoxin: Not analyzed

Purity:  $\geq 99\%$  as determined by SDS-PAGE

Form: Liquid

Storage: 10 mM TBS (pH=7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Protein A is a 40-60 kDa surface protein originally found in the cell wall of the bacteria *Staphylococcus aureus* (SPA). SPA binds proteins from many of mammalian species, most notably IgGs, and helps inhibit phagocytic engulfment and acts as an immunological disguise via this type of interaction, thus the bacteria will disrupts opsonization and phagocytosis. SPA is known to bind with Fc region of immunoglobulins preferentially through interaction with the VH3 variable region of the heavy chain. SPA has been shown to bind with high affinity to human IgG1 and IgG2 as well as mouse IgG2a and IgG2b, whereas bind with moderate affinity to human IgM, IgA and IgE as well as mouse IgG3 and IgG1. SPA is often produced in *E. coli* and is practically coupled to other molecules such as enzymes, biotin, radioactive iodine for use in immunology and other biological research. SPA is also immobilized onto solid supports such as agarose beads for total IgG purifying or interest protein or protein complex identifying in immunoprecipitation studies.