

Recombinant Protein A, HRP conjugated

Catalog Number : bse-0362P

Concentration: 1mg/ml.

Buffer: 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

Storage: Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Background: Protein A is a 40-60 kDa MSCRAMM surface protein originally found in the cell wall of the bacteria *Staphylococcus aureus*. It is encoded by the spa gene and its regulation is controlled by DNA topology, cellular osmolarity, and a two-component system called ArlS-ArlR. It has found use in biochemical research because of its ability to bind immunoglobulins. It binds proteins from many of mammalian species, most notably IgG's. It binds with the Fc region of immunoglobulins through interaction with the heavy chain. The result of this type of interaction is that, in serum, the bacteria will bind IgG molecules in the wrong orientation (in relation to normal antibody function) on their surface which disrupts opsonization and phagocytosis. It binds with high affinity to human IgG1 and IgG2 as well as mouse IgG2a and IgG2b. Protein A binds with moderate affinity to human IgM, IgA and IgE as well as to mouse IgG3 and IgG1. It does not react with human IgG3 or IgD, nor will it react to mouse IgM, IgA or IgE.

Application :

- Western blotting: 1:1000-2000
- Immunohistochemistry: 1:100-500
- ELISA: 1:2000-5000
- Optimal working dilutions must be determined by the end user.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.