83103 Avenue 48, Ste.1B #204
Coachella, CA 92236 USA
Phone : +1.6268339877
Email : info@cali-bio.com

# California Bioscience

## Product Datasheet

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|---|---|
| **Product Name** | Staphylococcal Protein A Recombinant |
| **Cata No** | CB500977 |
| **Source** | *Escherichia Coli.* |
| **Synonyms** | Immunoglobulin G-binding protein A, IgG-binding protein A, Staphylococcal protein A, SPA. |

### Description

Protein A is a cell wall protein deriving from Staphylococcus aureus which exhibits unique binding properties for IgG from a variety of mammalian species and for some IgM and IgA as well. It binds with the Fc region of immunoglobulins through interaction with the heavy chain. It couples to a wide variety of reporter molecules including fluorescent dyes, enzyme markers, biotin, colloidal gold and radioactive iodine without affecting the antibody binding site. Recombinant Protein A was developed to increase the specificity of the molecule for IgG and is widely used both in research and bioprocessing. The recombinant protein A is produced by expressing a modified protein A gene in E.coli. A specific purification process with strict quality control was taken to get the recombinant protein A with the purity of more than 98% , no human IgG affinity step is used during validated fermentation and purification and devoid of bacterial contaminant found normally in native Protein A. (Free of Staphylococcus endotoxins and hemolysin).

Recombinant Staphylococcal Protein A produced in E.Coli is a non-glycosylated, Polypeptide chain having a molecular mass of 45 kDa.Recombinant Staphylococcal Protein A is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered clear colorless solution.

### Purity

Greater than 98.0% as determined by RP-HPLC.

### Formulation

The protein solution contains no additives.

### Stability

SPA should be stored at -20°C.

### Activity

Greater than 95.0% binding activity to human IgG.