## **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 37-469aa

UniProt No. B3GGB2

NCBI Accession No. ACD80064

#### **Alternative Names**

Immunoglobulin G binding protein A, Immunoglobulin G binding protein A, Immunoglobulin G binding protein A Staphylococcal protein A, SPA,

### **PRODUCT SPECIFICATION**

#### **Molecular Weight**

48.1 kDa (434aa) confirmed by MALDI-TOF

**Concentration** 1mg/ml (determined by BCA assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol,

**Purity** > 90% by SDS-PAGE

**Endotoxin level** < 1 EU per 1ug of protein (determined by LAL method)

Tag Non-Tagged

Application SDS-PAGE

#### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

#### Description

Protein A is a 40-60 kDa surface protein originally found in the cell wall of the bacteria Staphylococcus aureus. 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. Due to its affinity for the Fc



region of many mammalian immunoglobulins, protein A is considered a universal reagent in biochemistry and immunology. Recombinant Staphylococcus aureus Protein A was expressed in E. coli and purified by using conventional chromatography.

#### **Amino acid Sequence**

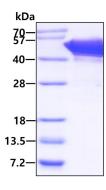
MAQHDEAQQN AFYQVLNMPN LNADQRNGFI QSLKDDPSQS ANVLGEAQKL NDSQAPKADA QQNNFNKDQQ SAFYEILNMP NLNEAQRNGF IQSLKDDPSQ STNVLGEAKK LNESQAPKAD NNFNKEQQNA FYEILNMPNL NEEQRNGFIQ SLKDDPSQSA NLLSEAKKLN ESQAPKADNK FNKEQQNAFY EILHLPNLNE EQRNGFIQSL KDDPSQSANL LAEAKKLNDA QAPKADNKFN KEQQNAFYEI LHLPNLTEEQ RNGFIQSLKD DPSVSKEILA EAKKLNDAQA PKEEDNNKPG KEDNNKPGKE DNNKPGKEDG NKPGKEDNKK PGKEDNKKPG KEDNKKPGKE DGNKPGKEDN KKPGKEDGNG VHVVKPGDTV NDIAKANGTT ADKIAADNKL ADKNMIKPGQ ELVVDKKQPA NHADANKAQA LPET

#### **General References**

Guirnalda P., et al. (2007) Int J Parasitol. 37(12):1391-9. Volpers C., et al. (2003) J Virol. 77(3):2093-104.

### DATA

#### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

