# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-270aa

**UniProt No.** P15927

NCBI Accession No. NP\_002937

### **Alternative Names**

Replication protein A 32 kDa subunit, Replication protein A 32 kDa subunit, REPA2, RPA32, RPA32, RP-A p32, RP-A p34

# **PRODUCT SPECIFICATION**

### **Molecular Weight**

31.7 kDa (293aa) confirmed by MALDI-TOF

**Concentration** 0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl, 2mM DTT

Purity > 90% by SDS-PAGE

Tag His-Tag

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

Replication Protein A (RPA) is a single stranded DNA binding protein. Human RPA is a heterotrimeric protein containing subunits of 14, 32 and 70kDa. This protein complex is highly conserved in eukaryotes and is essential in DNA replication, homologous recombination and nucleotide excision repair. The C-terminus of RPA2 can specifically intereact with the DNA repair enzyme uNG2 and repair factors XPA and Rad52, each of which functions in a different repair pathway. In addition, this protein binds specifically to the SH2 domain of Stat3 in



vivo, and overexpression of RPA2 corresponds to the augmented growth factor-stimulated tyrosine phosphorylation and transcription activities of Stat3. Recombinant human RPA2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

#### **Amino acid Sequence**

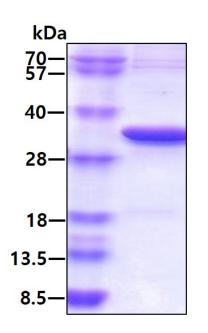
<MGSSHHHHHH SSGLVPRGSH MGS>MWNSGFE SYGSSSYGGA GGYTQSPGGF GSPAPSQAEK KSRARAQHIV PCTISQLLSA TLVDEVFRIG NVEISQVTIV GIIRHAEKAP TNIVYKIDDM TAAPMDVRQW VDTDDTSSEN TVVPPETYVK VAGHLRSFQN KKSLVAFKIM PLEDMNEFTT HILEVINAHM VLSKANSQPS AGRAPISNPG MSEAGNFGGN SFMPANGLTV AQNQVLNLIK ACPRPEGLNF QDLKNQLKHM SVSSIKQAVD FLSNEGHIYS TVDDDHFKST DAE

#### **General References**

Wang M., et al. (2000) Biochemistry. 39(21):6433-9. Mer G., et al. (2000) Cell. 103(3):449-56.

### DATA

#### SDS-PAGE



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