

Recombinant human SOS1 protein

Catalog Number: ATGP3756

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

564-1049aa

UniProt No.

Q07889

NCBI Accession No.

NP_005624

Alternative Names

Son of sevenless homolog 1, SOS1, GF1, GGF1, GINGF, HGF, NS4

PRODUCT SPECIFICATION

Molecular Weight

58kDa (495aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 30% glycerol, 0.1M NaCl, 1mM DTT, 0.2mM MgCl₂.

Purity

> 95% by SDS-PAGE

Endotoxin level

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

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

SOS1, also known as son of sevenless homolog 1, is a Ras and Rac guanine nucleotide exchange factor. This protein is composed of several important domains. The CDC25 and REM domains provide the catalytic activity of SOS1 towards Ras and the histone fold DH/PH (Dbl homology and Pleckstrin homology) domains function, in tandem, to stimulate GTP/GDP exchange for Rac. Also, binding of GTP activates Ras proteins, and subsequent

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hydrolysis of the bound GTP to GDP and phosphate inactivates signaling by these proteins. GTP binding can be catalyzed by guanine nucleotide exchange factors for RAS, and GTP hydrolysis can be accelerated by GTPase-activating proteins (GAPs). Recombinant human SOS1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

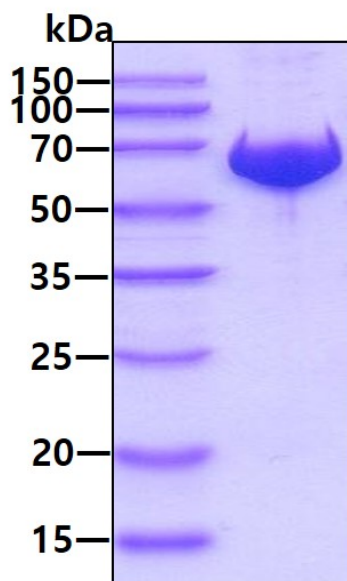
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VRGKAMKKWV ESITKIIQRK KIARDNGPGH NITFQSSPPT VEVHISRPGH IETFDLLTLH PIEIARQLTL LESDLYRAVQ
PSELVGSVWT KEDKEINSPN LLKMIRHTTN LTLWFEKCI V ETENLEERVA VVSRIIEILQ VFQELNNFNG VLEVVSAMNS
SPVYRLDHTF EQIPSRQKKI LEEAHELSED HYKKYLAKLR SINPPCV PFF GIYLTNLIK T EEGNPEVLKR HGKELINFSK
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RPSNPRPGT<H HHHHH>

General References

Baruzzi A., et al, (2015) J. Immunol. 195:4900-4912.
Lioubin MN., et al, (1994) Mol. Cell. Biol. 14:5682-5691.

DATA

SDS-PAGE



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