

## 32-13446: SOS1 Human

**Alternative Name :** SOS Ras/Rac Guanine Nucleotide Exchange Factor 1, Gingival Fibromatosis, Hereditary, 1, SOS-1, Son Of Sevenless Homolog 1 (Drosophila), Guanine Nucleotide Exchange Factor, Son Of Sevenless Homolog 1, GINGF, GGF1, GF1, HGF, NS4, Son of sevenless homolog 1.

### Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

SOS1, also known as Gingival Fibromatosis, is a Ras & Rac guanine nucleotide exchange factor. SOS1 is comprised of a number of significant domains. The REM and CDC25 domains provide the catalytic activity of SOS1 towards Ras and the histone fold DH/PH (Dbl homology & Pleckstrin homology) domains function, in tandem, to stimulate GTP/GDP exchange for Rac. Moreover, binding of GTP activates Ras proteins, and subsequent 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 enhanced by GTPase-activating proteins.

SOS1 produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 495 amino acids (564-1049a.a.) and having a molecular mass of 58.0kDa. (Molecular size on SDS-PAGE will appear at approximately 50-70kDa). SOS1 is expressed with a 6 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

|                            |  |
|----------------------------|--|
| <b>Amount :</b>            | 1 µg / 5 µg  |
| <b>Purification :</b>      | Greater than 95.0% as determined by SDS-PAGE.  |
| <b>Content :</b>           | SOS1 protein solution (0.25mg/ml) contains 20mM Tris-HCl (pH 7.5), 30% glycerol, 0.1M NaCl, 1mM DTT & 0.2mM MgCl <sub>2</sub> .  |
| <b>Storage condition :</b> | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.   |
| <b>Amino Acid :</b>        | ADPEEQMRLP SADVYRFAEP DSEENIIFEE NMQPKAGIPI IKAGTVIKLI ERLTYHMYAD PNFVRTFLT<br>YRSFCKPQEL LSLIERFEI PEPEPEADR IAIENGDQPL SAEKRFKKE YIQPVQLRVL NVCRHWVEHH<br>FYDFERDAYL LQRMEEFIGT VRGKAMKKWV ESITKIIQRK KIARDNGPGH NITFQSSPPT VEWHSRPGH<br>IETFDLLTLH PIEIARQLTL LESDLYRAVQ PSELVGSVWT KEDKEINSPN LLKMIRHTTN LTLWFEKCI<br>ETENLEERVA VVSRIEILQ VFQELNNFNG VLEVVSAMNS SPVYRLDHTF EQIPSRQKKI LEEAHELSED<br>HYKKYLAKLR SINPPCVPF GYLTNILKT EEGNPEVLKR HGKELINFSK RRVKVAEITGE IQQYQNQPYC<br>LRVESDIKRF FENLNPMGNS MEKEFTDYLF NKSLEIEPRN PKPLPRFPKK YSYPLKSPGV RPSNPRPGTH<br>HHHHH. |