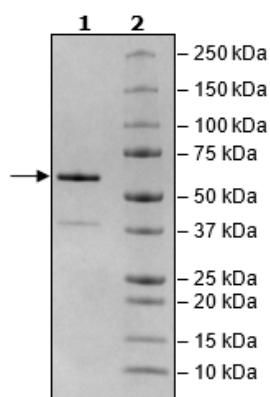


Product Information

Description:	Recombinant human SOS1 (son of sevenless homolog 1), encompassing amino acids 564-1049. This construct contains a C-terminus Flag-tag. This recombinant protein was affinity purified.
Species:	Human
Construct:	SOS1 (564-1049-FLAG)
Concentration:	1.54 mg/ml
Expression System:	<i>E. coli</i>
Purity:	≥90%
Format:	Aqueous buffer solution.
Formulated In:	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
MW:	58 kDa
Genbank Accession:	NM_005633
Stability:	At least 6 months at -80°C.
Storage:	-80°C
Instructions for Use:	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
Assay Conditions:	Assay quantifies SOS1-mediated loading of KRAS (G12C)-GDP with a fluorescent GTP analogue. Detection of successful loading was achieved by measuring resonance energy transfer from anti-His-terbium (FRET donor) bound to His-KRAS (G12C) to the loaded fluorescent GTP analogue (FRET acceptor). All steps of the assay were performed at room temperature. A volume of 5 µl of the KRAS (G12C) working solution and 5 µl of anti-His-terbium was added to all wells of the test plate. After 10 minutes, 5 µl of the SOS1 working solution and 5 µl 200 nM EDA-GTP-DY-647P1 was added to the wells. After 30 minutes incubation, HTRF was measured. Increase in TR-FRET is proportional to the exchange.
Applications:	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Quality Control Data

4-20% SDS-PAGE Coomassie Staining



KRAS (G12C) Activation by SOS1 Activity

