

Store at -20C  
#5890**SOS1 Antibody**

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M	Endogenous	152	Rabbit	#Q07889	6654

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
1:100

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

SOS1 Antibody detects endogenous levels of total SOS1 protein.

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ile1198 of human SOS1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

Son of sevenless (SOS) was first identified in *Drosophila* as a guanine nucleotide exchange factor (GEF) for Ras acting downstream of the Sevenless receptor (1). Two closely related homologs of *Drosophila* SOS are found in mammalian cells: SOS1 and SOS2 (2). SOS1 consists of histone folds, Dbl (DH) and pleckstrin (PH) homology domains, a Ras exchange motif (REM), and Cdc25 homology and polyproline domains (3). SOS1 binds to GRB2, NCK, and other adaptor proteins, and plays an important role in ERK activation downstream of protein tyrosine kinase receptor (RTK). Research studies have identified mutations in the corresponding SOS1 gene of patients with Noonan syndrome, a developmental disorder characterized by short stature, facial dysmorphism, and congenital heart defects (4,5).

**Background References**

1. Rogge, R.D. et al. (1991) *Cell* 64, 39-48.
2. Nimnual, A. and Bar-Sagi, D. (2002) *Sci STKE* 2002, pe36.
3. Chardin, P. et al. (1993) *Science* 260, 1338-43.
4. Tartaglia, M. et al. (2007) *Nat Genet* 39, 75-9.
5. Roberts, A.E. et al. (2007) *Nat Genet* 39, 70-4.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human **M:** Mouse

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