

Product datasheet for **AM03036PU-N**

SOS1 Mouse Monoclonal Antibody [Clone ID: SOS-1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	SOS-1
Applications:	ELISA, IF, WB
Recommended Dilution:	Western Blotting under reducing conditions (1 µg/ml): Positive control: HeLa human cervix carcinoma cell line. Immunocytochemistry. ELISA.
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Peptide corresponding to amino acids THPSMHRDGPPLLENAHSS of human Sos protein.
Specificity:	The antibody SOS-01 reacts with human Sos, an ubiquitously expressed 150 kDa intracellular protein.
Formulation:	PBS, pH 7.4 with 15 mM sodium azide as preservative. State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).
Concentration:	lot specific
Purification:	Protein A affinity chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid freeze/thaw cycles.
Stability:	Shelf life: One year from despatch.
Gene Name:	SOS Ras/Rac guanine nucleotide exchange factor 1
Database Link:	Entrez Gene 20662 Mouse Entrez Gene 6654 Human Q07889



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Background:

The guanine nucleotide exchange factor Sos (Son-of-sevenless) is a complex multidomain protein that activates the small GTPase Ras (H-Ras, K-Ras, N-Ras, but not functionally distinct R-Ras) in response to receptor tyrosine kinase stimulation. Nucleotide exchange activity of Sos is stimulated by allosteric Ras binding. By another (separable) guanine exchange factor domain domain Sos modulates activity of Rac/Rho GTPases. Sos thus integrates signals that affect both gene expression and cytoskeletal reorganization; the Sos-mediated Ras-activation and Rac activation differ in composition and stability of the formed complex.

Synonyms:

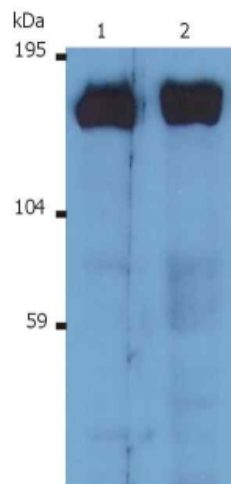
SOS-1, Son of sevenless homolog 1

Protein Families:

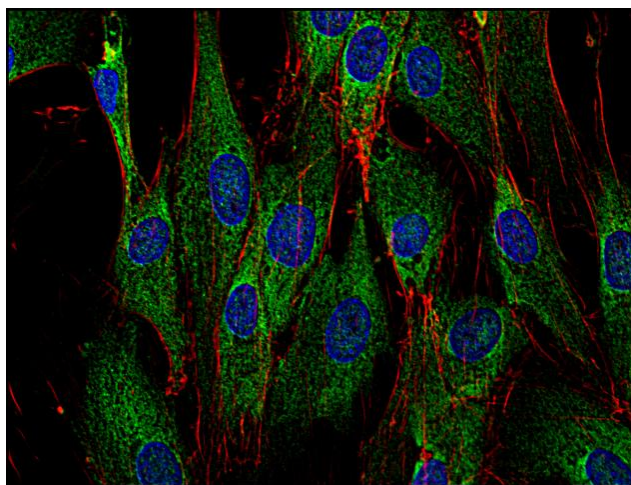
Druggable Genome

Protein Pathways:

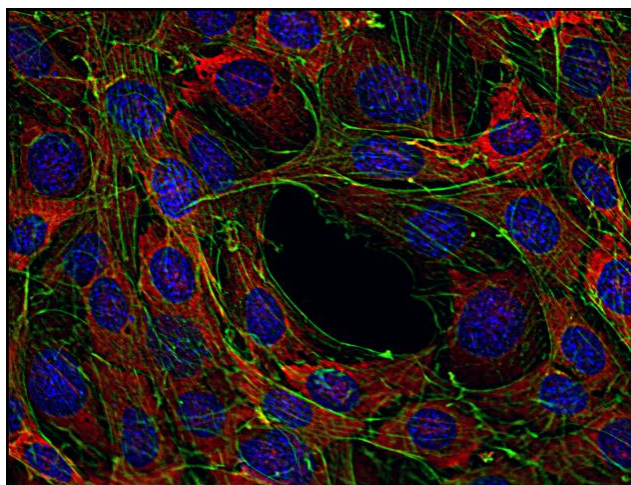
Acute myeloid leukemia, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Jak-STAT signaling pathway, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway

Product images:

Western Blotting analysis (reducing conditions) of human Sos using anti-Sos (SOS-01). Lane 1: K562 human Caucasian chronic myeloid leukemia cell line; Lane 2: RAJI human Burkitt lymphoma cell line



Immunofluorescence staining of Sos in human primary fibroblasts using anti-Sos (SOS-01; green). Actin cytoskeleton was decorated by phalloidin (red) and cell nuclei stained with DAPI (blue).



Immunofluorescence staining of Sos in murine transformed fibroblasts using anti-Sos (SOS-01; red). Actin cytoskeleton was decorated by phalloidin (green) and cell nuclei stained with DAPI (blue).