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SOS1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9024c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q07889
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23356
Calculated MW	152464
Antigen Region	934-962

Additional Information

Gene ID	6654
Other Names	Son of sevenless homolog 1, SOS-1, SOS1
Target/Specificity	This SOS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 934-962 amino acids from the Central region of human SOS1.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SOS1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SOS1
Function	Promotes the exchange of Ras-bound GDP by GTP (PubMed: 8493579). Probably by promoting Ras activation, regulates phosphorylation of MAP kinase MAPK3/ERK1 in response to EGF (PubMed:17339331). Catalytic component of a trimeric complex that participates in transduction of signals from Ras to Rac by promoting the Rac-specific guanine nucleotide exchange

factor (GEF) activity (By similarity).

Tissue Location Expressed in gingival tissues.

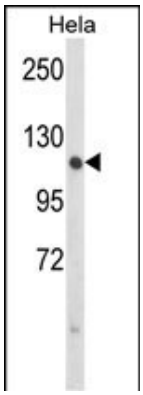
Background

Son of Sevenless 1 protein is an activator of ras proteins by stimulating the exchange of GDP for GTP on ras. Murine Son of Sevenless proteins have been shown to form a complex with activated EGF receptor, coupling tyrosine kinases to ras proteins. The SOS gene was originally isolated in Drosophila. Two mammalian homologues (mSOS1 and mSOS2) have been isolated from a mouse cDNA library and are expressed in a variety of mouse embryo and adult tissues. Human SOS1 and SOS2 homologs have also been isolated. The two mouse homologs are approximately 70% identical in composition. The mammalian SOS1 protein has a highly specific guanine nucleotide exchange activity towards p21ras. In epidermal growth factor stimulated cells, SOS1 interacts with SH3 domains of GRB2 and binds via SH2 domain to tyrosine 1068 of activated Epidermal Growth Factor receptor.

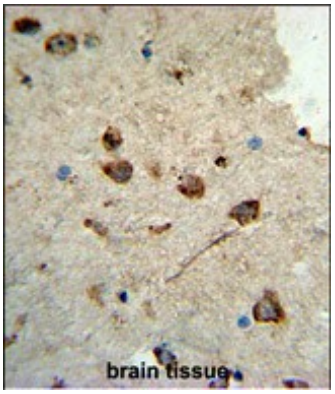
References

Roberts A.E., et.al., Nat. Genet. 39:70-74(2007).

Images



Western blot analysis of SOS1 Antibody (Center) (Cat. #AP9024c) in Hela cell line lysates (35ug/lane). SOS1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with SOS1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.