10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Spred3 Antibody

Catalog # ASC10785

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q2MJR0
Other Accession	NP_001035987, 110225353
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	42670
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Spred3 antibody can be used for detection of Spred3 by Western blot at 2 - 4 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	399473
Other Names	Sprouty-related, EVH1 domain-containing protein 3, Spred-3, SPRED3, EVE-3
Target/Specificity	SPRED3; This Spred3 antibody is predicted to have no cross-reactivity to Spred1 or Spred2.
Reconstitution & Storage	Spred3 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Spred3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPRED3
Synonyms	EVE-3
Function	Tyrosine kinase substrate that inhibits growth-factor- mediated activation of MAP kinase (By similarity). Inhibits fibroblast growth factor (FGF)-induced retinal lens fiber differentiation, probably by inhibiting FGF-mediated phosphorylation of ERK1/2 (By similarity). Inhibits TGFB-induced epithelial-to-mesenchymal transition in lens epithelial cells (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q6P6N5}; Peripheral membrane

protein {ECO:0000250|UniProtKB:Q6P6N5}

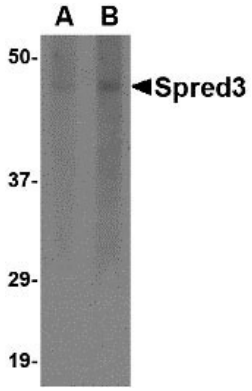
Background

Spred3 Antibody: Spred3 is a member of the Sprouty family, a group of proteins that act as negative regulators during development. Like Spred1 and Spred2, Spred3 contains and EVH1 domain in its amino terminus and a Sprouty-related cysteine-rich (SPR) domain in its C-terminus, but does not possess a functional c-kit binding domain (KBD). The Spred proteins have also been implicated in the negative feedback regulation of FGF signaling in embryogenesis and angiogenesis. Although Spred3 was initially reported to be expressed in brain, at least one report also indicates that Spred3 can be found in liver. At least two isoforms of Spred3 are known to exist.

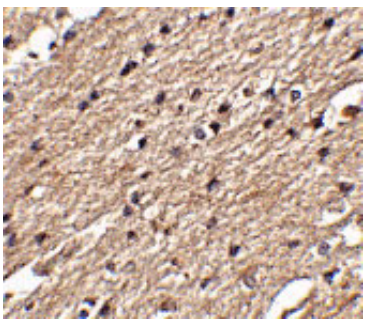
References

Kato R, Nonami A, Taketomi T, et al. Molecular cloning of mammalian Spred-3 which suppresses tyrosine kinase-mediated Erk activation. Biochem. Biophys. Res. Commun.2003; 302:767-72.
Casci T, Vinos J, and Freeman M. Sprouty, an intracellular inhibitor of Ras signaling. Cell1999; 96:655-65.
Minowada G, Jarvis LA, Chi CL, et al. Vertebrate Sprouty genes are induced by FGF signaling and can cause chondrodysplasia when overexpressed. Development1999; 126:4465-75.
Lee SH, Schloss DJ, Jarvis L, et al. Inhibition of angiogenesis by a mouse sprouty protein. J. Biol. Chem.2001; 276:4128-33.

Images

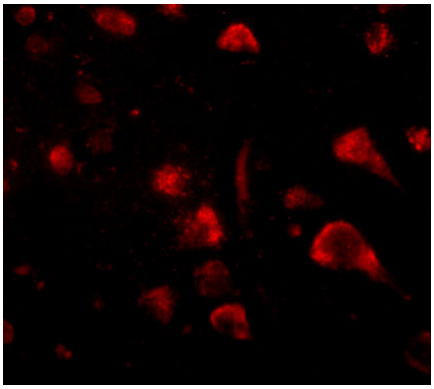


Western blot analysis of Spred3 in human brain tissue lysate with Spred3 antibody at (A) 2 and (B) 4 µg/mL.



Immunohistochemistry of Spred3 in human brain tissue with Spred3 antibody at 2.5 µg/mL.

Immunofluorescence of spred3 in human brain tissue with spred3 antibody at 20 µg/mL.



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