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

SPRY4-Y75 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7446D

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9C004
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15585
Calculated MW	32541
Antigen Region	26-56

Additional Information

Gene ID	81848
Other Names	Protein sprouty homolog 4, Spry-4, SPRY4
Target/Specificity	This SPRY4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 26-56 amino acids from human SPRY4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	SPRY4-Y75 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SPRY4
Function	Suppresses the insulin receptor and EGFR-transduced MAPK signaling pathway, but does not inhibit MAPK activation by a constitutively active mutant Ras (PubMed:12027893). Probably impairs the formation of GTP-Ras (PubMed:12027893). Inhibits Ras-independent, but not Ras-dependent,

activation of RAF1 (PubMed:12717443). Represses integrin-mediated cell spreading via inhibition of TESK1-mediated phosphorylation of cofilin (PubMed:15584898).

Cellular Location

Cytoplasm. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Note=Found in the cytoplasm in unstimulated cells but is translocated to the membrane ruffles in cells stimulated with EGF (epidermal growth factor) (By similarity). Colocalizes with TESK1 in vesicular spots in the cytoplasm (PubMed:15584898) {ECO:0000250|UniProtKB:Q9WTP2, ECO:0000269|PubMed:15584898}

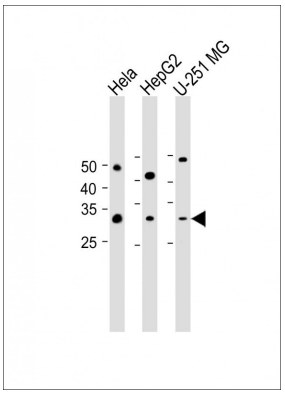
Background

SPRY4 is an inhibitor of the receptor-transduced mitogen-activated protein kinase (MAPK) signaling pathway. The protein is positioned upstream of RAS activation and impairs the formation of active GTP-RAS.

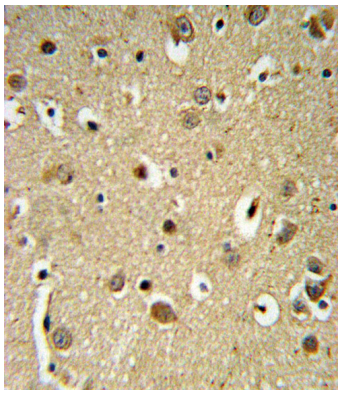
References

Tsai CF, et al. (2008) J Proteome Res
Guo A, et al. (2008) Proc Natl Acad Sci U S A 105, 692-7
Rikova K, et al. (2007) Cell 131, 1190-203
Wolf-Yadlin A, Hautaniemi S, Lauffenburger DA, White FM (2007) Proc Natl Acad Sci U S A 104, 5860-5
Tsumura Y, et al. (2005) Biochem J 387, 627-37

Images

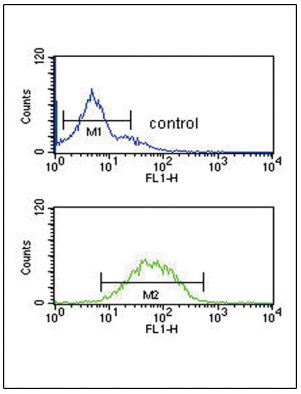


All lanes: Anti-SPRY4-Y75 Antibody at 1:500 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: U-251 MG whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 33 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



SPRY4-Y75 Antibody (Cat. #AP7446d) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SPRY4-Y75 Antibody for immunohistochemistry. Clinical relevance has not been evaluated.

SPRY4-Y75 Antibody (Cat. #AP7446d) flow cytometric analysis of K562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.