

**SPRY4-Y75 Antibody**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7446D**

**Specification**

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**SPRY4-Y75 Antibody - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">O9C004</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	32541
Antigen Region	26-56

**SPRY4-Y75 Antibody - 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~~1:10~50  
FC~~1:10~50

**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**

SPRY4-Y75 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**SPRY4-Y75 Antibody - 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

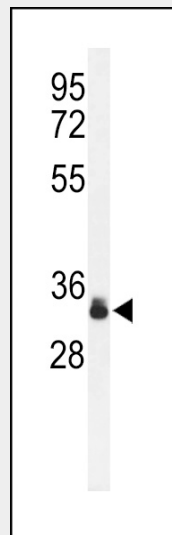
Cytoplasm. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Note=Found in the cytoplasm in unstimulated cells but is translocated to the membrane ruffles in cells stimulated with EGF (epidermal growth factor) (By similarity). Colocalizes with TESK1 in vesicular spots in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

#### SPRY4-Y75 Antibody - Protocols

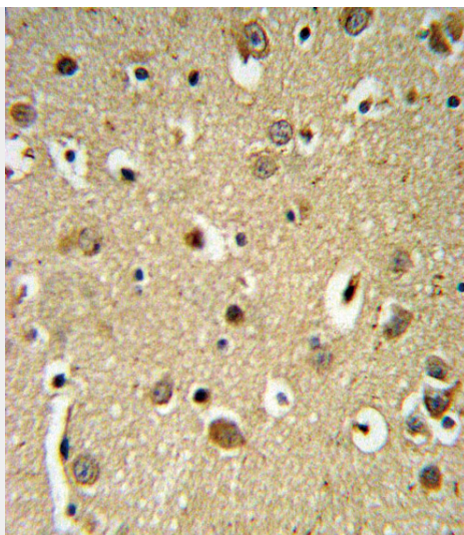
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

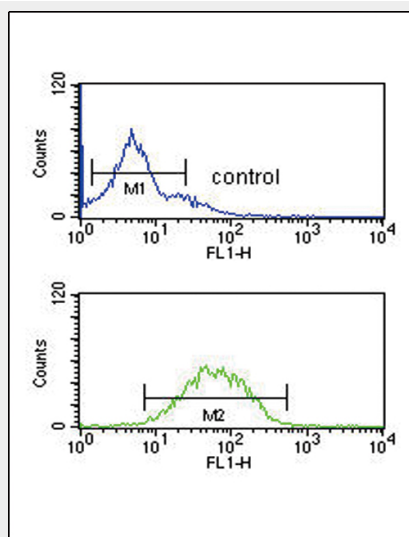
#### SPRY4-Y75 Antibody - Images



Western blot analysis of Phospho-SPRY4-Y75.ctrl (Cat. #AP7446d) in K562 cell line lysates (35ug/lane). SPRY4 (arrow) was detected using the purified Pab.



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.

### **SPRY4-Y75 Antibody - 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.

### **SPRY4-Y75 Antibody - 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