

# SPRED1 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM2036b

#### **Product Information**

Application WB, E
Primary Accession Q77699
Other Accession NP\_689807.1
Reactivity Human, Mouse

HostMouseClonalityMonoclonalIsotypeIgG1Clone Names462CT2.5.1Calculated MW50477

#### **Additional Information**

**Gene ID** 161742

Other Names Sprouty-related, EVH1 domain-containing protein 1, Spred-1, hSpred1,

SPRED1

Target/Specificity Purified His-tagged SPRED1 protein(Fragment) was used to produced this

monoclonal antibody.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein G column, followed by dialysis

against PBS.

**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** SPRED1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

## **Protein Information**

Name SPRED1

**Function** Tyrosine kinase substrate that inhibits growth-factor- mediated activation of

MAP kinase (By similarity). Negatively regulates hematopoiesis of bone marrow (By similarity). Inhibits fibroblast growth factor (FGF)-induced retinal

lens fiber differentiation, probably by inhibiting FGF-mediated

phosphorylation of ERK1/2 (By similarity). Attenuates actin stress fiber

formation via inhibition of TESK1-mediated phosphorylation of cofilin (PubMed:<u>18216281</u>). Inhibits TGFB-induced epithelial-to-mesenchymal

transition in lens epithelial cells (By similarity).

**Cellular Location** Cell membrane; Peripheral membrane protein. Membrane, caveola;

Peripheral membrane protein. Nucleus Note=Localized in cholesterol-rich

membrane raft/caveola fractions

**Tissue Location** Weakly expressed in embryonic cell line HEK293.

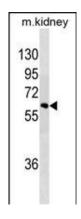
# **Background**

The protein encoded by this gene is a member of the Sprouty family of proteins and is phosphorylated by tyrosine kinase in response to several growth factors. The encoded protein can act as a homodimer or as a heterodimer with SPRED2 to regulate activation of the MAP kinase cascade. Defects in this gene are a cause of neurofibromatosis type 1-like syndrome (NFLS). [provided by RefSeq].

## References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Batz, C., et al. Blood 115(12):2557-2558(2010) Messiaen, L., et al. JAMA 302(19):2111-2118(2009) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Spurlock, G., et al. J. Med. Genet. 46(7):431-437(2009)

# **Images**



SPRED1 Antibody (Cat. #AM2036b) western blot analysis in mouse kidney tissue lysates (35µg/lane). This demonstrates the SPRED1 antibody detected the SPRED1 protein (arrow).

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