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SPRED1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56794

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q7Z699
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	50477
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPRED1
Epitope Specificity	301-400/444
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane. Membrane > caveola. Nucleus. Localized in cholesterol-rich membrane raft/caveola fractions.
SIMILARITY	Contains 1 KBD domain. Contains 1 SPR (sprouty) domain. Contains 1 WH1 domain.
Post-translational modifications	Phosphorylated on tyrosine.
DISEASE	Defects in SPRED1 are the cause of Legius syndrome (LEGIUSS) [MIM:611431]. It is a disorder characterized mainly by cafe au lait macules without neurofibromas or other tumor manifestations of neurofibromatosis type 1, axillary freckling, and macrocephaly. Additional clinical manifestations include Noonan-like facial dysmorphism, lipomas, learning disabilities and attention deficit-hyperactivity.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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, Jul 2008]

Additional Information

Gene ID	161742
Other Names	Sprouty-related, EVH1 domain-containing protein 1, Spred-1, hSpred1, SPRED1
Target/Specificity	Weakly expressed in embryonic cell line (HEK-293).

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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:18216281). 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.