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SPRED2 Rabbit pAb

Catalog # AP99928

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q7Z698
Other Accession	Q7Z698
Reactivity	Rat, Mouse
Predicted	Pig, Human, Rabbit, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47558
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPRED2
Epitope Specificity	201-300/418
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 KBD domain.Contains 1 SPR (sprouty) domain. Contains 1 WH1 domain.
SUBUNIT	Interacts with Ras (By similarity). Homodimer and heterodimer. Able to interact with SPRED1 to form heterodimers.
Post-translational modifications	Phosphorylated on tyrosine. Phosphorylation of Tyr-228 and Tyr-231 are required for ubiquitination.Ubiquitinated; leading to degradation by the proteasome.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SPRED2 is a member of the Sprouty (see SPRY1; MIM 602465)/SPRED family of proteins that regulate growth factor-induced activation of the MAP kinase cascade (see MAPK1; MIM 176948) (Nonami et al., 2004 [PubMed 15465815]).[supplied by OMIM, Mar 2008]

Additional Information

Gene ID	200734
Other Names	NS14; Spred-2; SPRE2_HUMAN; SPRED2; SPRE2_MOUSE; SPRE2_RAT; sprouty related EVH1 domain containing 2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	SPRED2
Function	Negatively regulates Ras signaling pathways and downstream activation of MAP kinases (PubMed:15683364, PubMed:34626534). Recruits and translocates NF1 to the cell membrane, thereby enabling NF1- dependent hydrolysis of active GTP-bound Ras to inactive GDP-bound Ras (PubMed:34626534). 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; Peripheral membrane protein {ECO:0000250|UniProtKB:Q924S7}; Cytoplasmic side {ECO:0000250|UniProtKB:Q924S7}. Cytoplasmic vesicle, secretory vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm. Note=Detected in the cytoplasm of the stratum spinosum cells, where it is associated with cytoplasmic vesicles that are supposed to be secretory granules
Tissue Location	Expressed in liver, skin, small intestine, salivary gland and prostate.

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