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SMURF2 Recombinant Rabbit mAb

Catalog # AP96656

Product Information

Application	WB
Primary Accession	Q52LL1
Other Accession	Q52LL1
Reactivity	Human
Predicted	Rat, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	86 KDa
Physical State	Liquid
Immunogen	A synthesized peptide derived from human SMURF2
Epitope Specificity	215-280/748
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol.
SIMILARITY	Contains 1 C2 domain. Contains 1 HECT (E6AP-type E3 ubiquitin-protein ligase) domain. Contains 3 WW domains.
SUBUNIT	Interacts (via WW domains) with SMAD1. Interacts (via WW domains) with SMAD2 (via PY-motif). Interacts (via WW domains) with SMAD3 (via PY-motif). Interacts with SMAD6. Interacts with SMAD7 (via PY-motif) and TGFBR1; SMAD7 recruits SMURF2 to the TGF-beta receptor and regulates its degradation. Does not interact with SMAD4; SMAD4 lacks a PY-motif. Interacts with AIMP1. Interacts with STAMBP and RNF11. Interacts with NDFIP1 and NDFIP2 (Probable); this interaction activates the E3 ubiquitin-protein ligase.
Post-translational modifications	Auto-ubiquitinated and ubiquitinated in the presence of RNF11 and UBE2D1. Ubiquitinated by the SCF(FBXL15) complex, leading to its 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	E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates.Interacts with SMAD7 to trigger SMAD7-mediated transforming growth factor beta/TGF-beta receptor ubiquitin-dependent degradation, thereby down-regulating TGF-beta signaling.

Additional Information

Gene ID	64750
Other Names	2810411E22Rik; RGD1310067; Q52LL1_HUMAN; SMUF2_HUMAN; SMURF2; hSMURF2; HECT-type E3 ubiquitin transferase SMURF2; SMAD ubiquitination regulatory factor 2; SMAD-specific E3 ubiquitin-protein ligase 2; 2.3.2.26;

	SMUF2_MOUSE; Q3TT87_MOUSE; Q5IRE6_MOUSE; SMAD specific E3 ubiquitin protein ligase 2
Dilution	WB=1:500-2000
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	SMURF2 Recombinant Rabbit mAb
Function	E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Interacts with SMAD1 and SMAD7 in order to trigger their ubiquitination and proteasome-dependent degradation. In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with SCYE1. Forms a stable complex with the TGF-beta receptor-mediated phosphorylated SMAD2 and SMAD3. In this way, SMAD2 may recruit substrates, such as SNON, for ubiquitin-mediated degradation. Enhances the inhibitory activity of SMAD7 and reduces the transcriptional activity of SMAD2. Coexpression of SMURF2 with SMAD1 results in considerable decrease in steady-state level of SMAD1 protein and a smaller decrease of SMAD2 level.

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