

SMURF2 Recombinant Rabbit mAb

Catalog # AP96656

Product Information

Application	WB
Primary Accession	Q52LL1
Other Accession	Q52LL1
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. Auto-ubiquitinated and ubiquitinated in the presence of RNF11 and UBE2D1. Ubiquitinated by the SCF(FBXL15) complex, leading to its degradation by the proteasome.
Post-translational modifications	
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'.