Anti-SMURF2 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R015134

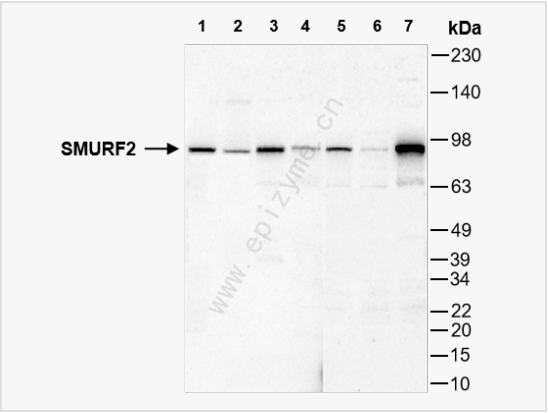
Product Information

Application	WB, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	82K41B79
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human SMURF 2
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-SMURF2 Rabbit mAb [82K41B79] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	E3 ubiquitin-protein ligase SMURF2, EC 6.3.2., hSMURF2, MGC138150, Smad specific E3 ubiquitin ligase 2, SMAD specific E3 ubiquitin protein ligase 2, SMAD ubiquitination regulatory factor 2, SMAD-specific E3 ubiquitin-protein ligase 2, SMUF2_HUMAN, Smurf2, Ubiquitin protein ligase SMURF2.
Calculated MW	Calculated MW: 86 kDa; Observed MW: 86 kDa
Uniprot ID	Q9HAU4
Gene ID	64750
Background	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.
Cellular Location	Nucleus. Cytoplasm. Cell membrane. Membrane raft. Cytoplasmic in the presence of SMAD7. Co-localizes with CAV1, SMAD7 and TGF-beta receptor in membrane rafts.
Tissue Location	Widely expressed.

Validation Images



Western Blot - Anti-SMURF2 Rabbit mAb [82K41B79]
All lanes: R015134 at 1:1,000 dilution
Lane 1: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 2: SW620 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 3: 293T (Human embryonic kidney cell) whole cell lysates
Lane 4: SCC-9 (Human tongue squamous carcinoma epithelial cell) whole cell lysates
Lane 5: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 6: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates
Lane 7: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 86 kDa
Observed band size: 86 kDa
Developed using the ECL technique (Cat. No. SQ201).