

SMURF2 Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8633b

Specification

SMURF2 Antibody - Product Information

Application	WB,E
Primary Accession	Q9HAU4
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	86196

SMURF2 Antibody - Additional Information

Gene ID 64750

Other Names

E3 ubiquitin-protein ligase SMURF2, hSMURF2, 6.3.2.-, SMAD ubiquitination regulatory factor 2, SMAD-specific E3 ubiquitin-protein ligase 2, SMURF2

Target/Specificity

This SMURF2 antibody is generated from a mouse immunized with a recombinant protein of human SMURF2.

Dilution

WB~~1:2000-1:4000

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

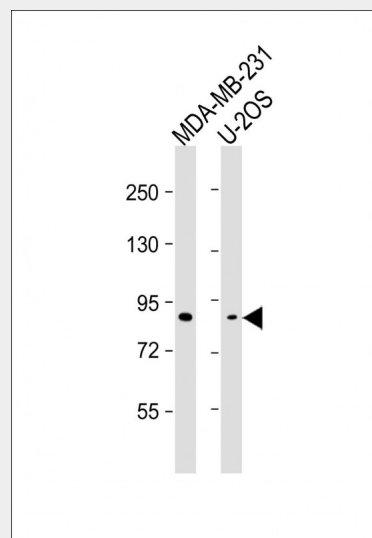
Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SMURF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

SMURF2 Antibody - Protein Information



All lanes : Anti-SMURF2 Antibody at 1:2000-1:4000 dilution Lane 1: MDA-MB-231 whole cell lysate Lane 2: U-2OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SMURF2 Antibody - 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

Name SMURF2 ([HGNC:16809](#))

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 (PubMed:[11016919](http://www.uniprot.org/citations/11016919) target="_blank">11016919). Interacts with SMAD7 to trigger SMAD7-mediated transforming growth factor beta/TGF-beta receptor ubiquitin-dependent degradation, thereby downregulating TGF-beta signaling (PubMed:[11163210](http://www.uniprot.org/citations/11163210) target="_blank">11163210, PubMed:[12717440](http://www.uniprot.org/citations/12717440) target="_blank">12717440). In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with AIMP1 (PubMed:[18448069](http://www.uniprot.org/citations/18448069) target="_blank">18448069). Also forms a stable complex with TGF-beta receptor-mediated phosphorylated SMAD1, SMAD2 and SMAD3, and targets SMAD1 and SMAD2 for ubiquitination and proteasome-mediated degradation (PubMed:[11016919](http://www.uniprot.org/citations/11016919) target="_blank">11016919, PubMed:[11158580](http://www.uniprot.org/citations/11158580) target="_blank">11158580, PubMed:[11389444](http://www.uniprot.org/citations/11389444) target="_blank">11389444). SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation (PubMed:[11389444](http://www.uniprot.org/citations/11389444) target="_blank">11389444). Negatively regulates TGF-beta-induced epithelial-mesenchymal transition and myofibroblast differentiation (PubMed:[30696809](http://www.uniprot.org/citations/30696809) target="_blank">30696809).

Cellular Location

Nucleus. Cytoplasm. Cell membrane. Membrane raft. Note=Cytoplasmic in the presence of SMAD7. Colocalizes with CAV1, SMAD7 and TGF-beta receptor in membrane

considerable decrease in steady-state level of SMAD1 protein and a smaller decrease of SMAD2 level.

SMURF2 Antibody - References

Kavsak P., et al. Mol. Cell 6:1365-1375(2000).
Lin X., et al. J. Biol. Chem. 275:36818-36822(2000).
Zhang Y., et al. Proc. Natl. Acad. Sci. U.S.A. 98:974-979(2001).
Bonni S., et al. Nat. Cell Biol. 3:587-595(2001).
Di Guglielmo G.M., et al. Nat. Cell Biol. 5:410-421(2003).

rafts

Tissue Location

Widely expressed.

SMURF2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)