

**SMURF 2 Antibody**  
Rabbit mAb  
Catalog # AP91683

## Specification

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### SMURF 2 Antibody - Product Information

Application	WB
Primary Accession	<a href="#">O9HAU4</a>
Reactivity	Rat
Clonality	Monoclonal
<b>Other Names</b>	
hSMURF2; SMUF2_HUMAN; Smurf2;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	86196 Da

### SMURF 2 Antibody - Additional Information

Purification	<b>Affinity-chromatography</b>
Immunogen	<b>A synthesized peptide derived from human SMURF 2</b>
Description	<b>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.</b>
Storage Condition and Buffer	<b>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.</b>

### SMURF 2 Antibody - Protein Information

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)). Interacts with SMAD7 to trigger SMAD7-mediated transforming growth factor beta/TGF-beta receptor ubiquitin-dependent degradation, thereby down-regulating TGF-beta signaling (PubMed:[11163210](http://www.uniprot.org/citations/11163210), PubMed:[12717440](http://www.uniprot.org/citations/12717440), PubMed:[21791611](http://www.uniprot.org/citations/21791611)). In addition,

interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with AIMP1 (PubMed:<a href="http://www.uniprot.org/citations/18448069" target="\_blank">18448069</a>). 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:<a href="http://www.uniprot.org/citations/11016919" target="\_blank">11016919</a>, PubMed:<a href="http://www.uniprot.org/citations/11158580" target="\_blank">11158580</a>, PubMed:<a href="http://www.uniprot.org/citations/11389444" target="\_blank">11389444</a>). SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation (PubMed:<a href="http://www.uniprot.org/citations/11389444" target="\_blank">11389444</a>). Negatively regulates TGFB1-induced epithelial-mesenchymal transition and myofibroblast differentiation (PubMed:<a href="http://www.uniprot.org/citations/30696809" target="\_blank">30696809</a>).

#### 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 rafts

#### Tissue Location

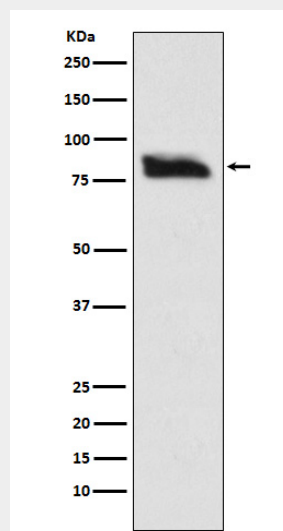
Widely expressed.

### SMURF 2 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](#)

### SMURF 2 Antibody - Images



Western blot analysis of SMURF 2 expression in SH-SY-5Y cell lysate.