

Anti-SMURF 2 Antibody
Catalog # ABO12778**Specification**

Anti-SMURF 2 Antibody - Product Information

Application	WB
Primary Accession	O9HAU4
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for E3 ubiquitin-protein ligase SMURF2(SMURF2) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SMURF 2 Antibody - Additional Information

Gene ID 64750

Other Names

E3 ubiquitin-protein ligase SMURF2, hSMURF2, 2.3.2.26, HECT-type E3 ubiquitin transferase SMURF2, SMAD ubiquitination regulatory factor 2, SMAD-specific E3 ubiquitin-protein ligase 2, SMURF2

Calculated MW

86196 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

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

Tissue Specificity

Widely expressed.

Protein Name

E3 ubiquitin-protein ligase SMURF2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human SMURF 2 (317-351aa DHNNRTTQFTDPRLSANLHLVLRQNQLKDQQQQQ), identical to the related mouse

sequence.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-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:[18448069](http://www.uniprot.org/citations/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), PubMed:[11158580](http://www.uniprot.org/citations/11158580), PubMed:[11389444](http://www.uniprot.org/citations/11389444)). SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation (PubMed:[11389444](http://www.uniprot.org/citations/11389444)). Negatively regulates TGFB1-induced epithelial-mesenchymal transition and myofibroblast differentiation (PubMed:[30696809](http://www.uniprot.org/citations/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 rafts

Tissue Location

Widely expressed.

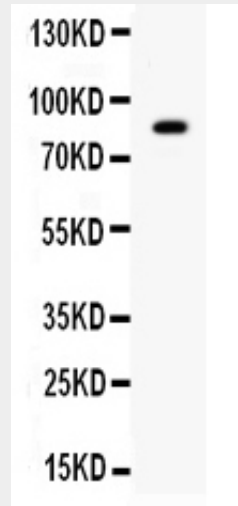
Anti-SMURF 2 Antibody - Protocols

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](#)

Anti-SMURF 2 Antibody - Images



Western blot analysis of SMURF2 expression in SMMC whole cell lysates (lane 1). SMURF2 at 86KD was detected using rabbit anti- SMURF2 Antigen Affinity purified polyclonal antibody (Catalog # ABO12778) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-SMURF 2 Antibody - Background

E3 ubiquitin-protein ligase SMURF2 is an enzyme that in humans is encoded by the SMURF2 gene. The SMURF2 gene is mapped to chromosome 17q22-q23 based on sequence similarity between the SMURF2 sequence and a genomic contig. SMURF2 is a HECT domain E3 ubiquitin ligase involved in degradation of SMADs, TGF-beta receptor (TGFBR), and other substrates. It also functions in regulation of neuronal and planar cell polarity, induction of senescence, and tumor suppression