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# SMURF 2 Antibody

Rabbit mAb
Catalog # AP91683

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q9HAU4 |
| **Reactivity** | Rat, Human, Mouse |
| **Clonality** | Monoclonal |
| **Other Names** | hSMURF2; SMUF2_HUMAN; Smurf2; |
| **Isotype** | Rabbit IgG |
| **Host** | Rabbit |
| **Calculated MW** | 86196 |

## Additional Information

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| **Dilution** | WB 1:500~1:1000 |
| **Purification** | Affinity-chromatography |
| **Immunogen** | A synthesized peptide derived from human SMURF 2 |
| **Description** | 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. |
| **Storage Condition and Buffer** | 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. |

## Protein Information

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| **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). 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, PubMed:12717440, PubMed:21791611). In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with AIMP1 (PubMed: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, PubMed:11158580, PubMed:11389444). SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation (PubMed:11389444). Negatively regulates TGFB1-induced |

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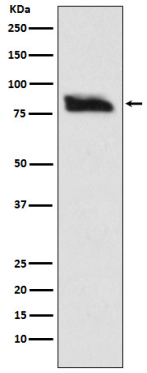
| | epithelial-mesenchymal transition and myofibroblast differentiation (PubMed:30696809). |
| **Cellular Location** | Nucleus. Cytoplasm. Cell membrane. Membrane raft. Note=Cytoplasmic in the presence of SMAD7. Colocalizes with CAV1, SMAD7 and TGF-beta receptor in membrane rafts |
| **Tissue Location** | Widely expressed. |

## Images




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