

KD-Validated Anti-SMURF2 Mouse Monoclonal Antibody
Mouse monoclonal antibody
Catalog # AGI2000**Specification****KD-Validated Anti-SMURF2 Mouse Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	O9HAU4
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1 kappa
Calculated MW	Predicted, 86 kDa, observed, 75 kDa
Gene Name	KDa SMURF2
Aliases	SMURF2; SMAD Specific E3 Ubiquitin Protein Ligase 2; HECT-Type E3 Ubiquitin Transferase SMURF2; SMAD Ubiquitination Regulatory Factor 2; E3 Ubiquitin-Protein Ligase SMURF2; HSMURF2; SMAD-Specific E3 Ubiquitin-Protein Ligase 2; E3 Ubiquitin Ligase SMURF2; EC 2.3.2.26; EC 6.3.2
Immunogen	Recombinant protein of human Smurf2

KD-Validated Anti-SMURF2 Mouse Monoclonal Antibody - Additional InformationGene 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 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=16809)
target="_blank">HGNC:16809)

KD-Validated Anti-SMURF2 Mouse Monoclonal Antibody - Protein InformationName 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, PubMed:11158580, PubMed:11389444). SMAD2 may recruit substrates, such as SNON, for ubiquitin-dependent degradation (PubMed:11389444). Negatively regulates TGFB1-induced 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

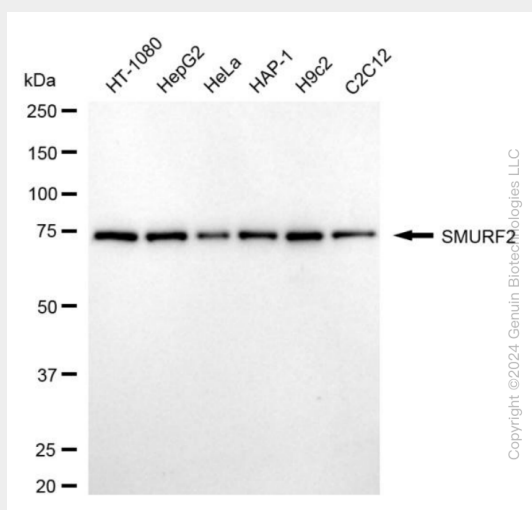
Widely expressed.

KD-Validated Anti-SMURF2 Mouse Monoclonal Antibody - Protocols

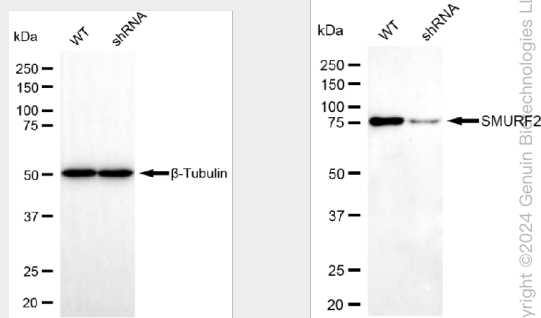
Provided below are standard protocols that you may find useful for product applications.

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

KD-Validated Anti-SMURF2 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-SMURF2 antibody (Cat#AGI2000). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-SMURF2 antibody (Cat#AGI2000, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-SMURF2 antibody (Cat#AGI2000). SMURF2 expression in wild-type (WT) and SMURF2 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-SMURF2 antibody (Cat#AGI2000, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.