

SMURF1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP2104b**Specification**

SMURF1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9HCE7](#)**SMURF1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 57154**Other Names**

E3 ubiquitin-protein ligase SMURF1, hSMURF1, 632-, SMAD ubiquitination regulatory factor 1, SMAD-specific E3 ubiquitin-protein ligase 1, SMURF1, KIAA1625

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2104b](/product/products/AP2104b) was selected from the C-term region of human SMURF1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SMURF1 Antibody (C-term) Blocking Peptide - Protein Information**Name** SMURF1**Synonyms** KIAA1625**Function**

E3 ubiquitin-protein ligase that acts as a negative regulator of BMP signaling pathway. Mediates ubiquitination and degradation of SMAD1 and SMAD5, 2 receptor-regulated SMADs specific for the BMP pathway. Promotes ubiquitination and subsequent proteasomal degradation of TRAF family members and RHOA. Promotes ubiquitination and subsequent proteasomal degradation of MAVS (PubMed: [23087404](http://www.uniprot.org/citations/23087404)). Acts as an antagonist of TGF-beta signaling by ubiquitinating TGFBR1 and targeting it for degradation (PubMed: [21791611](http://www.uniprot.org/citations/21791611)). Plays a role in dendrite formation by melanocytes (PubMed: [23999003](http://www.uniprot.org/citations/23999003)).

Cellular Location

Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side

Tissue Location

Expressed in melanocytes (PubMed:23999003).

SMURF1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SMURF1 Antibody (C-term) Blocking Peptide - Images**SMURF1 Antibody (C-term) Blocking Peptide - Background**

SMURF1 is an 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. This protein interacts with receptor-regulated SMADs specific for the BMP pathway, SMAD1 and SMAD5, in order to trigger their ubiquitination and degradation and thereby their inactivation.

SMURF1 Antibody (C-term) Blocking Peptide - References

Tajima, Y., et al., J. Biol. Chem. 278(12):10716-10721 (2003). Suzuki, C., et al., J. Biol. Chem. 277(42):39919-39925 (2002). Ebisawa, T., et al., J. Biol. Chem. 276(16):12477-12480 (2001). Zhu, H., et al., Nature 400(6745):687-693 (1999). Lambris, J., et al., J. Immunol. Methods 27(1):55-59 (1979).