

**SMURF1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2104B****Specification**

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**SMURF1 Antibody (C-term) - Product Information**

|                   |                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------|
| Application       | WB, IHC-P,E                                                                                       |
| Primary Accession | <a href="#">Q9HCE7</a>                                                                            |
| Other Accession   | <a href="#">A2A5Z6</a> , <a href="#">Q9HAU4</a> , <a href="#">Q9PUN2</a> , <a href="#">Q9CUN6</a> |
| Reactivity        | Human                                                                                             |
| Predicted         | Mouse, Xenopus                                                                                    |
| Host              | Rabbit                                                                                            |
| Clonality         | Polyclonal                                                                                        |
| Isotype           | Rabbit IgG                                                                                        |
| Antigen Region    | 711-740                                                                                           |

**SMURF1 Antibody (C-term) - 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**

This SMURF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 711-740 amino acids from the C-terminal region of human SMURF1.

**Dilution**

WB~~1:500

IHC-P~~1:50~100

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

SMURF1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**SMURF1 Antibody (C-term) - 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](#)). Acts as an antagonist of TGF-beta signaling by ubiquitinating TGFBR1 and targeting it for degradation (PubMed:[21791611](#)). Plays a role in dendrite formation by melanocytes (PubMed:[23999003](#)).

**Cellular Location**

Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side

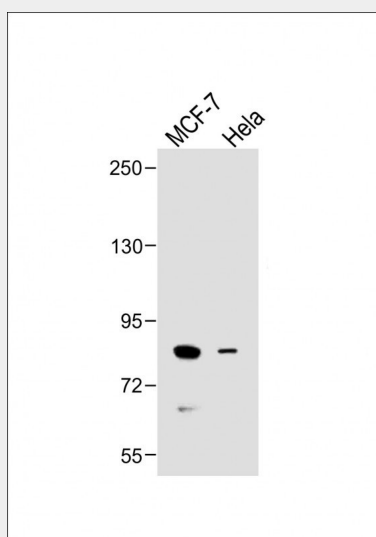
**Tissue Location**

Expressed in melanocytes (PubMed:23999003).

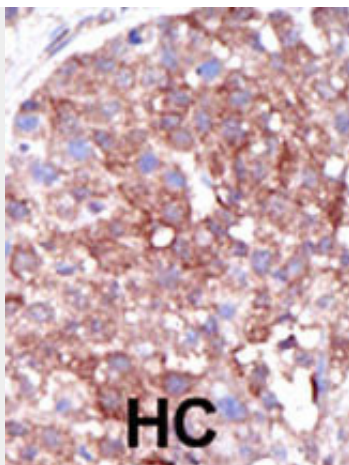
**SMURF1 Antibody (C-term) - Protocols**

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](#)

**SMURF1 Antibody (C-term) - Images**

All lanes : Anti-SMURF1 Antibody (C-term) at 1:500 dilution Lane 1: MCF-7 whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 86 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **SMURF1 Antibody (C-term) - 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) - 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).

#### **SMURF1 Antibody (C-term) - Citations**

- [The interaction of mPar3 with the ubiquitin ligase Smurf2 is required for the establishment of neuronal polarity.](#)