

Anti-SMURF1 Picoband Antibody

Catalog # ABO12578

Specification

Anti-SMURF1 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionO9HCE7HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for E3 ubiquitin-protein ligase SMURF1(SMURF1) detection. Testedwith WB in Human;Rat.

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

Anti-SMURF1 Picoband Antibody - Additional Information

Gene ID 57154

Other Names E3 ubiquitin-protein ligase SMURF1, hSMURF1, 2.3.2.26, HECT-type E3 ubiquitin transferase SMURF1, SMAD ubiquitination regulatory factor 1, SMAD-specific E3 ubiquitin-protein ligase 1, SMURF1, KIAA1625

Calculated MW 86114 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Rat

Subcellular Localization Cytoplasm . Cell membrane ; Peripheral membrane protein ; Cytoplasmic side .

Tissue Specificity Expressed in melanocytes (PubMed:23999003). .

Protein Name E3 ubiquitin-protein ligase SMURF1

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 SMURF1 (326-351aa DHNNRTTQFTDPRLHHIMNHQCQLKE), 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-SMURF1 Picoband Antibody - 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).

Anti-SMURF1 Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-SMURF1 Picoband Antibody - Images





Western blot analysis of SMURF1 expression in rat brain extract (lane 1) and MCF-7 whole cell lysates (lane 2). SMURF1 at 86KD was detected using rabbit anti- SMURF1 Antigen Affinity purified polyclonal antibody (Catalog # ABO12578) at0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

Anti-SMURF1 Picoband Antibody - Background

E3 ubiquitin-protein ligase SMURF1 is an enzyme that in humans is encoded by the SMURF1 gene. It is mapped to 7q22.1. This gene encodes a ubiquitin ligase that is specific for receptor-regulated SMAD proteins in the bone morphogenetic protein (BMP) pathway. This protein plays a key roll in the regulation of cell motility, cell signalling, and cell polarity. Alternative splicing results in multiple transcript variants encoding different isoforms.