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Anti-SMAD6 Picoband Antibody

Catalog # ABO12193

Specification

Anti-SMAD6 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	O43541
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Mothers against decapentaplegic homolog 6(SMAD6) detection. Tested with WB in Human;Mouse;Rat.

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

Anti-SMAD6 Picoband Antibody - Additional Information

Gene ID 4091

Other Names
Mothers against decapentaplegic homolog 6, MAD homolog 6, Mothers against DPP homolog 6, SMAD family member 6, SMAD 6, Smad6, hSMAD6, SMAD6, MADH6

Calculated MW
53497 MW KDa

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

Subcellular Localization
Nucleus .

Tissue Specificity
Ubiquitous in various organs, with higher levels in lung. Isoform B is up-regulated in diseased heart tissue.

Protein Name
Mothers against decapentaplegic homolog 6

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human SMAD6 recombinant protein (Position: E131-D456). Human SMAD6 shares 95.3% amino acid (aa) sequence identity with mouse SMAD6.

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.

Sequence Similarities
Belongs to the dwarfin/SMAD family.

Anti-SMAD6 Picoband Antibody - Protein Information

Name SMAD6

Synonyms MADH6

Function
Transforming growth factor-beta superfamily receptors signaling occurs through the Smad family of intracellular mediators. SMAD6 is an inhibitory Smad (i-Smad) that negatively regulates signaling downstream of type I transforming growth factor-beta (PubMed:9436979, PubMed:16951688, PubMed:22275001, PubMed:9759503, PubMed:10647776, PubMed:10708948, PubMed:10708949, PubMed:30848080). Acts as a mediator of TGF-beta and BMP anti-inflammatory activities. Suppresses IL1R-TLR signaling through its direct interaction with PEL1, preventing NF-kappa-B activation, nuclear transport and NF-kappa-B- mediated expression of pro-inflammatory genes (PubMed:16951688). Blocks the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor- activated SMAD1-binding (PubMed:9436979, PubMed:30848080). Binds to regulatory elements in target promoter regions (PubMed:16491121).

Cellular Location
Nucleus.

Tissue Location
[Isoform B]: Expressed in the brain, heart, ovary, peripheral blood leukocytes, small intestine, spleen, thymus, bone marrow, fetal liver and lymph nodes.

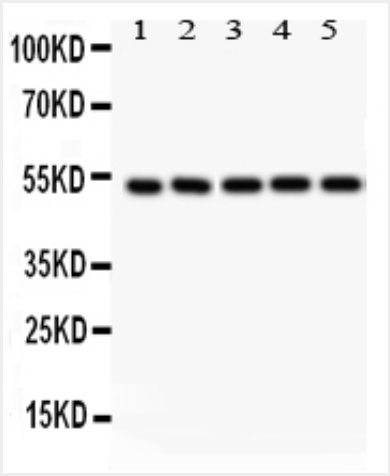
Anti-SMAD6 Picoband Antibody - Protocols

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

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- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-SMAD6 Picoband Antibody - Images



Anti- SMAD6 Picoband antibody, ABO12193, Western blottingAll lanes: Anti SMAD6 (ABO12193) at 0.5ug/mlLane 1: Rat Lung Tissue Lysate at 50ugLane 2: Mouse Lung Tissue Lysate at 50ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: JURKAT Whole Cell Lysate at 40ugLane 5: MM231 Whole Cell Lysate at 40ugPredicted bind size: 53KDObserved bind size: 53KD

Anti-SMAD6 Picoband Antibody - Background

Mothers against decapentaplegic homolog 6, also known as SMAD6, is a protein that in humans is encoded by the SMAD6 gene. It belongs to the SMAD family of proteins, which belongs to the TGFÎ² superfamily of modulators. By PCR screening of a somatic cell hybrid panel and YACs, this gene was mapped to 15q22.31. And this gene acts as a mediator of TGF-beta and BMP antiflammatory activity. It can suppress 1L 1R-TLR signaling through its direct interaction with PEL1 and prevent NF-kappa-B activation, nuclear transport and NF-kappa-B-mediated expression of proinflammatory genes. SMAD6 may play a role in blocking the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor-activated SMAD1-binding and binding to regulatory elements in target promoter regions.