

## **Product datasheet for TA336359**

## 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com

OriGene Technologies, Inc.

Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **SMAD6 Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** ICC/IF, IHC, Simple Western, WB

**Recommended Dilution:** Immunohistochemistry-Paraffin: 5 - 10 ug/mL, Immunocytochemistry/ Immunofluorescence:

1 - 5 ug/mL, Simple Western: 1:50, Immunohistochemistry: 5 - 10 ug/mL, Western Blot: 0.5 - 2

ug/mL

**Reactivity:** Human, Mouse, Rat, Primate, Sheep

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** This antibody was developed against 2 synthetic peptides found between amino acids 30-150

and 300-400 of human SMAD6 (GenBank Accession No. AAH12986.1). These peptide sequences are specific to SMAD6, and have high homology to SMAD6 in multiple species.

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

**Concentration:** lot specific

Purification: Protein G purified

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** SMAD family member 6

Database Link: NP 001136333

Entrez Gene 17130 MouseEntrez Gene 367100 RatEntrez Gene 4091 Human

043541





Background:

SMADs are members of the MAD-related family of molecules. MAD-related proteins are a family of intracellular proteins that are essential components in the signaling pathways of the serine/threonine kinase receptors of the transforming growth factor beta superfamily. SMADs can be divided into receptor-regulated SMADs (R-SMADs: SMAD1, SMAD2, SMAD5, SMAD8 and SMAD9), common-mediator SMAD (co-SMAD: SMAD4), and inhibitory SMADs (I-SMADs: SMAD6 and SMAD7). SMAD1, SMAD5, SMAD8 and SMAD9 have high degrees of homology and antibodies are available that recognize sequences common to all of them. SMAD8 and SMAD9 are typically used as alternate names for one another in the literature. Human SMAD1 is a 465 amino acid protein; GenBank Accession No. AAP36050.1. Human SMAD2 is a 467 amino acid protein; GenBank Accession No. AAC51918.1 Human SMAD3 is a 425 amino acid protein; GenBank Accession No. NP 005893.1 Human SMAD4 is a 552 amino acid protein GenBank Accession No. NP\_005350.1. Human SMAD5 is a 465 amino acid protein; GenBank Accession No. AAC50791.1. Human SMAD6 is a 496 amino acid protein; GenBank Accession No. AAH12986.1 Human SMAD7 is a 426 amino acid protein; GenBank Accession No. AAB81354.1 Mouse SMAD8 is a 430 amino acid protein; GenBank Accession No. AAN85445.1 Human SMAD9 is a 430 amino acid protein; GenBank Accession No. NP 005896.1

**Synonyms:** AOVD2; HsT17432; MADH6; MADH7

**Note:** Immunohistochemistry (Bouin): See Childs (2010) et al for more details.

Protein Families: Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

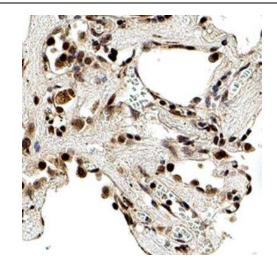
**Protein Pathways:** TGF-beta signaling pathway

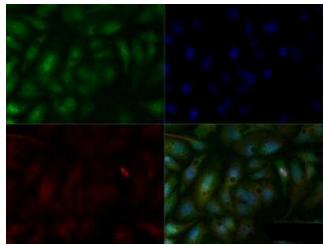
## **Product images:**

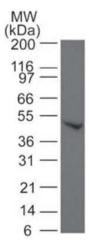


Simple Western: SMAD6 Antibody TA336359 - Simple Western lane view shows a specific band for SMAD6 in 0.5 mg/ml of HepG2 lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.









Immunohistochemistry-Paraffin: SMAD6
Antibody TA336359 - SMAD6 was detected in immersion fixed paraffin-embedded sections of human lung using Rabbit Anti-Human SMAD6 polyclonal Antibody (Catalog # TA336359) at 5 ug/ml for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Nuclear staining was localized to the pneumocytes.

Immunocytochemistry/Immunofluorescence: SMAD6 Antibody TA336359 - HepG2 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti-SMAD6 (TA336359) at a 1:100 dilution overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at a 1:500 dilution. Alpha tubulin was used as a co-stain at a 1:1000 dilution and detected with an anti-mouse DyLight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.

Western Blot: SMAD6 Antibody TA336359 - Analysis using SMAD6 antibody. Lysate from Jurkat cells probed with SMAD6 antibody at 2 ug/ml.