

Smad1 Blocking Peptide
Catalog # PBV10195b**Specification**

Smad1 Blocking Peptide - Product Information

Primary Accession	P97588
Gene ID	25671
Calculated MW	52713

Smad1 Blocking Peptide - Additional Information**Gene ID** 25671**Application & Usage**

The peptide is used for blocking the antibody activity of Smad1. It usually blocks the antibody activity completely in Western blot analysis by incubating the peptide with equal volume of antibody for 30-60 minutes at 37°C.

Other Names

Mothers against decapentaplegic homolog 1, MAD homolog 1, Mothers against DPP homolog 1, SMAD family member 1, SMAD 1, Smad1, Smad1, Mad1, Madh1

Target/Specificity

Smad1

Formulation

50 µg (0.5 mg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA and 0.02% thimerosal.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

Smad1 Blocking Peptide is for research use only and not for use in diagnostic or therapeutic procedures.

Smad1 Blocking Peptide - Protein Information**Name** Smad1**Synonyms** Mad1, Madh1**Function**

Transcriptional modulator that plays a role in various cellular processes, including embryonic

development, cell differentiation, and tissue homeostasis. Upon BMP ligand binding to their receptors at the cell surface, is phosphorylated by activated type I BMP receptors (BMPRIIs) and associates with SMAD4 to form a heteromeric complex which translocates into the nucleus acting as transcription factor. In turn, the hetero-trimeric complex recognizes cis-regulatory elements containing Smad Binding Elements (SBEs) to modulate the outcome of the signaling network. SMAD1/OAZ1/PSMB4 complex mediates the degradation of the CREBBP/EP300 repressor SNIP1. Positively regulates BMP4-induced expression of odontogenic development regulator MSX1 following IPO7-mediated nuclear import (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q15797}. Nucleus {ECO:0000250|UniProtKB:Q15797}. Note=Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4. Co-localizes with LEMD3 at the nucleus inner membrane (By similarity). Exported from the nucleus to the cytoplasm when dephosphorylated (By similarity) {ECO:0000250|UniProtKB:P70340, ECO:0000250|UniProtKB:Q15797}

Tissue Location

Ubiquitous; present in liver, lung, stomach and spleen with lower level in heart, testes and skeletal muscle

Smad1 Blocking Peptide - 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](#)

Smad1 Blocking Peptide - Images