

**Smad7 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP6753c****Specification**

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**Smad7 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [O15105](#)**Smad7 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 4092**Other Names**

Mothers against decapentaplegic homolog 7, MAD homolog 7, Mothers against DPP homolog 7, Mothers against decapentaplegic homolog 8, MAD homolog 8, Mothers against DPP homolog 8, SMAD family member 7, SMAD 7, Smad7, hSMAD7, SMAD7, MADH7, MADH8

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Smad7 Antibody (Center) Blocking Peptide - Protein Information****Name** SMAD7**Synonyms** MADH7, MADH8**Function**

Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit TGF-beta (Transforming growth factor) and activin signaling by associating with their receptors thus preventing SMAD2 access (PubMed:<a href="http://www.uniprot.org/citations/21791611" target="\_blank">21791611</a>). Functions as an adapter to recruit SMURF2 to the TGF-beta receptor complex. Also acts by recruiting the PPP1R15A-PP1 complex to TGFBR1, which promotes its dephosphorylation. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

**Cellular Location**

Nucleus. Cytoplasm. Note=Interaction with NEDD4L or RNF111 induces translocation from the nucleus to the cytoplasm (PubMed:16601693). TGF-beta stimulates its translocation from the nucleus to the cytoplasm. PDPK1 inhibits its translocation from the nucleus to the cytoplasm in response to TGF-beta (PubMed:17327236)

**Tissue Location**

Ubiquitous with higher expression in the lung and vascular endothelium

**Smad7 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**Smad7 Antibody (Center) Blocking Peptide - Images****Smad7 Antibody (Center) Blocking Peptide - Background**

Smad7 is a member of the MAD-related family of molecules. MAD-related proteins are a recently identified family of intracellular proteins that are thought to be essential components in the signaling pathways of the serine/threonine kinase receptors of the transforming growth factor beta super family.

**Smad7 Antibody (Center) Blocking Peptide - References**

Hirata,H., et.al., Cancer 115 (19), 4488-4503 (2009)