

**Phospho-Smad2 (Ser255) Rabbit mAb**  
Catalog # AP74975**Specification****Phospho-Smad2 (Ser255) Rabbit mAb - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q15796</a>
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	52306

**Phospho-Smad2 (Ser255) Rabbit mAb - Additional Information****Gene ID** 4087**Other Names**  
SMAD2**Dilution**  
WB~~1/500-1/1000  
IHC~~1/50-1/100**Format**  
Liquid**Phospho-Smad2 (Ser255) Rabbit mAb - Protein Information****Name** SMAD2**Synonyms** MADH2, MADR2**Function**

Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. Promotes TGFB1-mediated transcription of odontoblastic differentiation genes in dental papilla cells (By similarity). Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator. May act as a tumor suppressor in colorectal carcinoma (PubMed:<a href="http://www.uniprot.org/citations/8752209" target="\_blank">8752209</a>).

**Cellular Location**

Cytoplasm. Nucleus. Note=Cytoplasmic and nuclear in the absence of TGF-beta. On TGF-beta stimulation, migrates to the nucleus when complexed with SMAD4 or with IPO7 (PubMed:21145499, PubMed:9865696). On dephosphorylation by phosphatase PPM1A, released from the SMAD2/SMAD4 complex, and exported out of the nucleus by interaction with RANBP1 (PubMed:16751101, PubMed:19289081). Localized mainly to the nucleus in the early stages of

embryo development with expression becoming evident in the cytoplasm at the blastocyst and epiblast stages (By similarity). {ECO:0000250|UniProtKB:Q62432, ECO:0000269|PubMed:16751101, ECO:0000269|PubMed:19289081, ECO:0000269|PubMed:21145499, ECO:0000269|PubMed:9865696}

#### Tissue Location

Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta.

#### Phospho-Smad2 (Ser255) Rabbit mAb - 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](#)

#### Phospho-Smad2 (Ser255) Rabbit mAb - Images



