

# Phospho-Smad2 (Ser250) Rabbit mAb

Catalog # AP76367

## Product Information

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

## Additional Information

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<b>Gene ID</b>	4087
<b>Other Names</b>	SMAD2
<b>Dilution</b>	WB~~1/500-1/1000
<b>Format</b>	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.

## Protein Information

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<b>Name</b>	SMAD2
<b>Synonyms</b>	MADH2, MADR2
<b>Function</b>	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 TGF-beta-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="#">8752209</a> ).
<b>Cellular Location</b>	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).

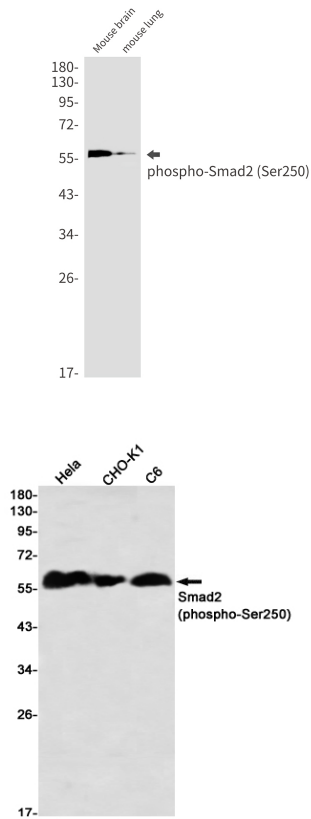
{ECO:0000250|UniProtKB:Q62432, ECO:0000269|PubMed:16751101,  
ECO:0000269|PubMed:19289081, ECO:0000269|PubMed:21145499,  
ECO:0000269|PubMed:9865696}

## Tissue Location

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

## Images

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