

**Smad2 (phospho Ser250) (PT0058R) PT® Rabbit mAb**

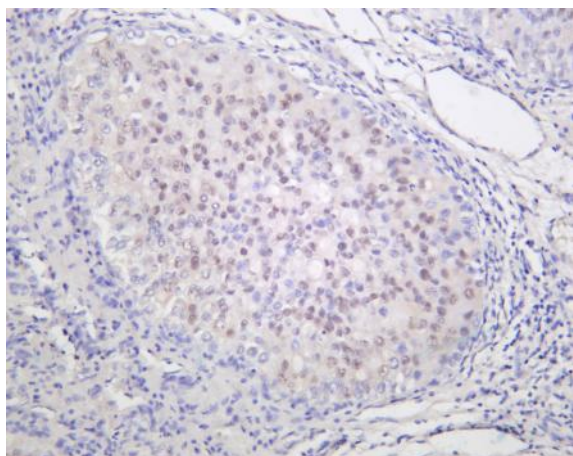
<b>Catalog No :</b>	YM8030
<b>Reactivity :</b>	Human; Mouse; Rat;
<b>Applications :</b>	WB;IHC;IF;IP;ELISA
<b>Target :</b>	Smad2
<b>Fields :</b>	>>Cell cycle;>>Endocytosis;>>Cellular senescence;>>TGF-beta signaling pathway;>>Apelin signaling pathway;>>Hippo signaling pathway;>>Signaling pathways regulating pluripotency of stem cells;>>Th17 cell differentiation;>>Relaxin signaling pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Chagas disease;>>Human T-cell leukemia virus 1 infection;>>Pathways in cancer;>>Proteoglycans in cancer;>>Colorectal cancer;>>Pancreatic cancer;>>Hepatocellular carcinoma;>>Gastric cancer;>>Inflammatory bowel disease;>>Diabetic cardiomyopathy
<b>Gene Name :</b>	SMAD2
<b>Protein Name :</b>	Mothers against decapentaplegic homolog 2
<b>Human Gene Id :</b>	4087
<b>Human Swiss Prot No :</b>	Q15796
<b>Mouse Gene Id :</b>	17126
<b>Mouse Swiss Prot No :</b>	Q62432
<b>Rat Gene Id :</b>	29357
<b>Rat Swiss Prot No :</b>	O70436
<b>Specificity :</b>	endogenous
<b>Formulation :</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source :</b>	Monoclonal, rabbit, IgG, Kappa

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<b>Dilution :</b>	IHC 1:100-1:500, WB 1:1000-1:5000, IF 1:200-1:1000, ELISA 1:5000-1:20000, IP 1:50-1:200,
<b>Purification :</b>	Protein A
<b>Storage Stability :</b>	-15°C to -25°C/1 year (Do not lower than -25°C)
<b>Molecularweight :</b>	58kD
<b>Observed Band :</b>	58kD
<b>Cell Pathway :</b>	Regulates Angiogenesis; Cell_Cycle_G1S; Cell_Cycle_G2M_DNA; Protein_Acetylation
<b>Background :</b>	<p>The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene <i>mothers against decapentaplegic</i> (Mad) and the C. elegans gene <i>Sma</i>. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signal of the transforming growth factor (TGF)-beta, and thus regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. This protein is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. In response to TGF-beta signal, this protein is phosphorylated by the TGF-beta receptors. The phosphorylation induces the dissociation of this protein with SARA and the association with the family member SMAD4. The association with SMAD4 is important for the translocation</p>
<b>Function :</b>	<p>disease: Defects in SMAD2 are found in sporadic cases of colorectal carcinoma., function: Transcriptional modulator activated by TGF-beta and activin type 1 receptor kinase. SMAD2 is a receptor-regulated SMAD (R-SMAD). May act as a tumor suppressor in colorectal carcinoma., PTM: Acetylated on Lys-19 by coactivators in response to TGF-beta signaling, which increases transcriptional activity. Isoform short: Acetylation increases DNA binding activity in vitro and enhances its association with target promoters in vivo., PTM: In response to TGF-beta, ubiquitinated by NEDD4L; which promotes its degradation., PTM: Phosphorylated on one or several of Thr-220, Ser-245, Ser-250, and Ser-255. In response to TGF-beta, phosphorylated on Ser-465/467 by TGF-beta and activin type 1 receptor kinases. Able to interact with SMURF2 when phosphorylated on Ser-465/467, recruiting other proteins, such as SNON, for degr</p>
<b>Subcellular Location :</b>	Cytoplasm, Nuclear
<b>Expression :</b>	Expressed at high levels in skeletal muscle, endothelial cells, heart and placenta.

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## Products Images



Human hepatocellular carcinoma was stained with anti-Smad2 (phospho Ser250) (PT0058R) rabbit antibody

Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Smad2 (phospho Ser250) (PT0058R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 treated with TPA for 48 hours Lane 2: Hela Lane 3: H9C2 Lane 4: RAW264.7 Predicted band size: 58kDa Observed band size: 58kDa