

## Phospho-Smad2 (Thr220) Rabbit Polyclonal Antibody

### Catalog #: EAB13637

Host/Isotype	Clonality	Applications	MW (kDa)	Reactivity
Rabbit IgG	Polyclonal	WB, IHC-P, IF/ICC, ELISA	52	Human, Mouse, Rat

### Applications Dilutions

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>WB</b> (Western Blotting)	1:500-2000
<b>IHC-P</b> (Immunohistochemistry-Paraffin)	1:50-300
<b>IF/ICC</b> (Immunofluorescence/Immunocytochemistry)	1:50-300
<b>ELISA</b> (Enzyme-linked Immunosorbent Assay)	1:5000-20000

### Product Information

<b>Conjugate</b>	Unconjugate
<b>Specificity</b>	Phospho-Smad2 (Thr220) Rabbit Polyclonal Antibody detects endogenous levels of Smad2 only when phosphorylated at Thr220.
<b>Purification</b>	Affinity purification
<b>Concentration</b>	1mg/ml
<b>Format</b>	Liquid
<b>Formulation</b>	In PBS, pH 7.4, Containing 0.02% sodium azide, 0.5% BSA and 50% Glycerol
<b>Shipping</b>	Gel Pack
<b>Storage</b>	Store at -20°C least 1 year from the date of shipment. Avoid repeated freeze/thaw cycles. Aliquots may be stored at +4°C for 1-2 weeks
<b>UniProt ID</b>	<a href="#">Q15796</a>
<b>Entrez-Gene Id</b>	<a href="#">4087</a>

### Product Description

The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. 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 of this protein into the nucleus, where it binds to target promoters and forms a transcription repressor complex with other cofactors. This protein can also be phosphorylated by activin type 1 receptor kinase, and mediates the signal from the activin. Alternatively spliced transcript variants have been observed for this gene.

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