



# Rabbit Anti-Human SMAD2 monoclonal antibody, clone S.653.0 (CABT-L1597)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	SMAD2
<b>Immunogen</b>	Synthetic peptide corresponding to residues surrounding Trp85 of human Smad2
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Non-human primate
<b>Clone</b>	S.653.0
<b>Purification</b>	Affinity Purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	ICC, IP, IF, WB
<b>Format</b>	Liquid
<b>Buffer</b>	0.01M HEPES, pH 7.5, with 0.15M NaCl, 100µg/ml BSA, 50% glycerol
<b>Preservative</b>	See individual product datasheet
<b>Storage</b>	-20°C

## BACKGROUND

<b>Introduction</b>	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
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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 encoding the same protein have been observed.

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**Keywords**

SMAD2;SMAD family member 2;JV18;MADH2;MADR2;JV18-1;hMAD-2;hSMAD2;mothers against decapentaplegic homolog 2;MAD homolog 2;mother against DPP homolog 2;Sma- and Mad-related protein 2;SMAD, mothers against DPP homolog 2

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## GENE INFORMATION

**Entrez Gene ID**

[4087](#)

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**UniProt ID**

[Q15796](#)

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