

**Smad1 (phospho Ser465) rabbit pAb****Cat#: orb764332 (Manual)**

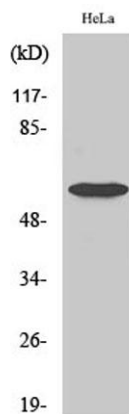
For research use only. Not intended for diagnostic use.

<b>Product Name</b>	Smad1 (phospho Ser465) rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human Smad1 around the phosphorylation site of Ser465. AA range:416-465
<b>Specificity</b>	Phospho-Smad1 (S465) Polyclonal Antibody detects endogenous levels of Smad1 protein only when phosphorylated at S465.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Mothers against decapentaplegic homolog 1
<b>Gene Name</b>	SMAD1
<b>Cellular localization</b>	Cytoplasm . Nucleus . Cytoplasmic in the absence of ligand. Migrates to the nucleus when complexed with SMAD4 (PubMed:15647271). Co-localizes with LEMD3 at the nucleus inner membrane (PubMed:15647271). Exported from the nucleus to the cytoplasm when dephosphorylated (By similarity). .
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

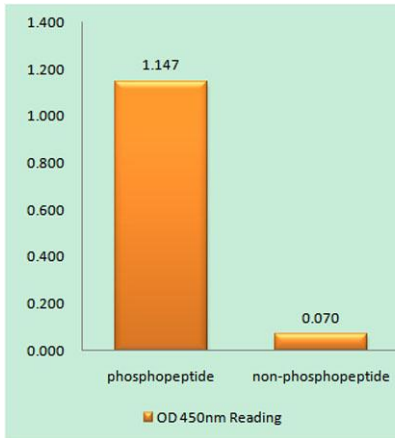
<b>Clonality</b>	Polyclonal
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	60kD
<b>Human Gene ID</b>	4086
<b>Human Swiss-Prot Number</b>	Q15797
<b>Alternative Names</b>	SMAD1; BSP1; MADH1; MADR1; Mothers against decapentaplegic homolog 1; MAD homolog 1; Mothers against DPP homolog 1; JV4-1; Mad-related protein 1; SMAD family member 1; SMAD 1; Smad1; hSMAD1; Transforming growth factor-beta-signaling protein

## Background

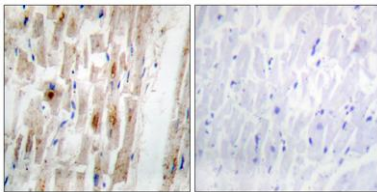
The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the gene products of the *Drosophila* gene 'mothers against decapentaplegic' (Mad) and the *C. elegans* gene Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein mediates the signals of the bone morphogenetic proteins (BMPs), which are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. In response to BMP ligands, this protein can be phosphorylated and activated by the BMP receptor kinase. The phosphorylated form of this protein forms a complex with SMAD4, which is important for its function in the transcription regulation. This protein is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and proteasome-med



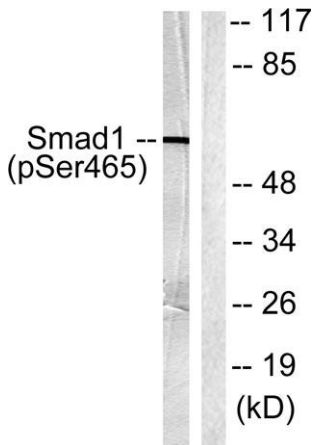
**Western Blot analysis of various cells using Phospho-Smad1 (S465) Polyclonal Antibody**



**Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Smad1 (Phospho-Ser465) Antibody**



**Immunohistochemistry analysis of paraffin-embedded human heart, using Smad1 (Phospho-Ser465) Antibody. The picture on the right is blocked with the phospho peptide.**



**Western blot analysis of lysates from HeLa cells treated with Serum 10% 15', using Smad1 (Phospho-Ser465) Antibody. The lane on the right is blocked with the phospho peptide.**