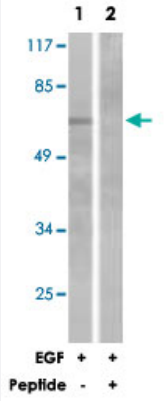
SMAD1 polyclonal antibody

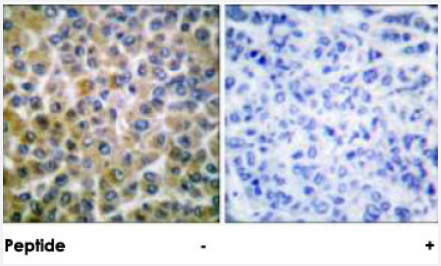
Catalog # PAB18108 Size 100 ug

Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from COS-7 cells, treated with EGF (200 ng/mL, 15 mins), using SMAD1 polyclonal antibody (Cat # PAB18108). Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SMAD1 polyclonal antibody (Cat # PAB18108).
Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of SMAD1.
Immunogen	A synthetic peptide corresponding to human SMAD1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to SMAD1.
Form	Liquid

Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:40000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

  Western blot analysis of extracts from COS-7 cells, treated with EGF (200 ng/mL, 15 mins), using SMAD1 polyclonal antibody (Cat # PAB18108).
  Peptide "+" means "peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using SMAD1 polyclonal antibody (Cat # PAB18108).
  Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

Gene Info — SMAD1

Entrez GeneID	4086
Protein Accession#	Q15797
Gene Name	SMAD1
Gene Alias	BSP1, JV4-1, JV41, MADH1, MADR1
Gene Description	SMAD family member 1
Omim ID	601595

Gene Ontology	Hyperlink
Gene Summary	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-mediated degradation. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq
Other Designations	MAD, mothers against decapentaplegic homolog 1|Mad-related protein 1|SMAD, mothers against DPP homolog 1|Sma- and Mad-related protein 1|TGF-beta signaling protein 1|mothers against DPP homolog 1|transforming growth factor-beta signaling protein 1

Pathway

- TGF-beta signaling pathway

Disease

- Cleft Lip
- Cleft Palate
- Diabetes Mellitus
- Diabetic Nephropathies
- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Hemochromatosis
- Hypertension
- Kidney Failure
- Neoplasm Recurrence
- Neoplasms
- Obesity

- Ovarian Failure
- Polycystic Ovary Syndrome
- Puberty
- Thrombophilia
- Tobacco Use Disorder