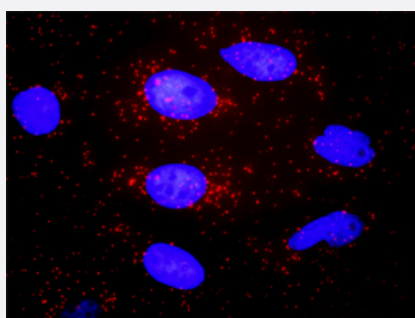


SMAD1(phospho S465) & SMAD1 Protein Phosphorylation Antibody Pair

Catalog # DP0239 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein phosphorylation. HeLa cells were stained with dual recognition antibody pair set, rabbit polyclonal antibody 1:1200 and mouse monoclonal antibody 1:50. Each red dot represents one single phosphorylated protein. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description

This protein phosphorylation antibody pair set comes with two antibodies, one against the SMAD1 protein, and the other against the specific S465 phosphorylated site of SMAD1 for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

Reactivity

Human

Quality Control Testing

Dual recognition immunofluorescence result.
Representative image of Proximity Ligation Assay of protein phosphorylation. HeLa cells were stained with dual recognition antibody pair set, rabbit polyclonal antibody 1:1200 and mouse monoclonal antibody 1:50. Each red dot represents one single phosphorylated protein. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Supplied Product

Antibody pair set content:
1. Phospho-SMAD1 S465 rabbit polyclonal antibody (20 ul)
In PBS (without Mg²⁺ and Ca²⁺), 150 mM NaCl, pH 7.4 (0.02% sodium azide, 50% glycerol)
2. SMAD1 mouse monoclonal antibody (40 ug)
In 1x PBS, pH 7.2
*Reagents are sufficient for at least 30-50 assays using recommended protocols.

Storage Instruction

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — SMAD1

Entrez GeneID	4086
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	<p>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]</p>
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](#)