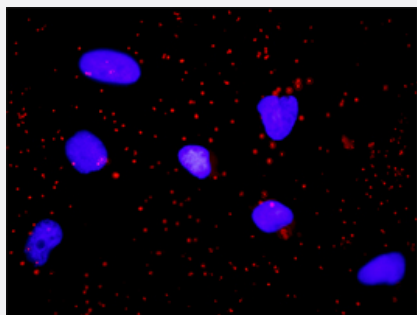


SMAD1 & GSK3B Protein Protein Interaction Antibody Pair

Catalog # DI0224

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between SMAD1 and GSK3B. HeLa cells were stained with anti-SMAD1 rabbit purified polyclonal antibody 1:1200 and anti-GSK3B mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description

This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the SMAD1 protein, and the other against the GSK3B protein for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

Reactivity

Human

Quality Control Testing

Protein protein interaction immunofluorescence result.
Representative image of Proximity Ligation Assay of protein-protein interactions between SMAD1 and GSK3B. HeLa cells were stained with anti-SMAD1 rabbit purified polyclonal antibody 1:1200 and anti-GSK3B mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. 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. SMAD1 rabbit purified polyclonal antibody (100 ug)
2. GSK3B mouse monoclonal antibody (40 ug)
*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 — GSK3B

Entrez GeneID [2932](#)

Gene Name GSK3B

Gene Alias -

Gene Description glycogen synthase kinase 3 beta

Omim ID [605004](#)

Gene Ontology [Hyperlink](#)

Gene Summary The protein encoded by this gene is a serine-threonine kinase, belonging to the glycogen synthase kinase subfamily. It is involved in energy metabolism, neuronal cell development, and body pattern formation. Polymorphisms in this gene have been implicated in modifying risk of Parkinson disease, and studies in mice show that overexpression of this gene may be relevant to the pathogenesis of Alzheimer disease. Alternatively spliced transcript variants encoding different isoforms have been found for this gene

Other Designations GSK3beta isoform|glycogen synthase kinase-3 beta

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

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

- [Axon guidance](#)
- [B cell receptor signaling pathway](#)
- [Basal cell carcinoma](#)
- [Cell cycle](#)
- [Chemokine signaling pathway](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [Hedgehog signaling pathway](#)
- [Insulin signaling pathway](#)
- [Melanogenesis](#)
- [Neurotrophin signaling pathway](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [T cell receptor signaling pathway](#)

- [TGF-beta signaling pathway](#)
- [Wnt signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Anorexia Nervosa](#)
- [Bipolar Disorder](#)
- [Bone Diseases](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bulimia](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cognition](#)
- [Dementia](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Drug Toxicity](#)
- [Dyskinesia](#)

- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Hemochromatosis](#)
- [Hypercholesterolemia](#)
- [Hypertension](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Mood Disorders](#)
- [Movement Disorders](#)
- [Multiple Myeloma](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Parkinson disease](#)
- [Personality Disorders](#)
- [Personality Inventory](#)
- [Polycystic Ovary Syndrome](#)
- [Polycystic Ovary Syndrome](#)
- [Psychiatric Status Rating Scales](#)
- [Psychotic Disorders](#)
- [Puberty](#)

- [Pulmonary Disease](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Sleep Deprivation](#)
- [Stomach Neoplasms](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Weight Gain](#)
- [Werner syndrome](#)