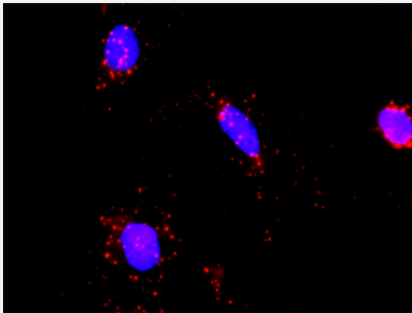


CAMK2G & SMAD3 Protein Protein Interaction Antibody Pair

Catalog # DI0380

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CAMK2G and SMAD3. HeLa cells were stained with anti-CAMK2G rabbit purified polyclonal antibody 1:1200 and anti-SMAD3 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 CAMK2G protein, and the other against the SMAD3 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 CAMK2G and SMAD3. HeLa cells were stained with anti-CAMK2G rabbit purified polyclonal antibody 1:1200 and anti-SMAD3 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. CAMK2G rabbit purified polyclonal antibody (100 ug)
2. SMAD3 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 — CAMK2G

Entrez GeneID	818
Gene Name	CAMK2G
Gene Alias	CAMK, CAMK-II, CAMKG, FLJ16043, MGC26678
Gene Description	calcium/calmodulin-dependent protein kinase II gamma
Omim ID	602123
Gene Ontology	Hyperlink
Gene Summary	The product of this gene belongs to the Serine/Threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. Calcium signaling is crucial for several aspects of plasticity at glutamatergic synapses. In mammalian cells the enzyme is composed of four different chains: alpha, beta, gamma, and delta. The product of this gene is a gamma chain. Six alternatively spliced variants that encode six different isoforms have been characterized to date. Additional alternative splice variants that encode different isoforms have been described, but their full-length nature has not been determined. [provided by RefSeq]
Other Designations	CaM kinase II OTTHUMP00000019843 OTTHUMP00000019844 calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma

Gene Info — SMAD3

Entrez GeneID	4088
Gene Name	SMAD3
Gene Alias	DKFZp586N0721, DKFZp686J10186, HSPC193, HsT17436, JV15-2, MADH3, MGC60396
Gene Description	SMAD family member 3
Omim ID	603109
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 functions as a transcriptional modulator activated by transforming growth factor-beta and is thought to play a role in the regulation of carcinogenesis. [provided by RefSeq]

Other Designations

MAD, mothers against decapentaplegic homolog 3|SMA- and MAD-related protein 3|SMAD, mothers against DPP homolog 3|mad homolog JV15-2|mad protein homolog|mothers against decapentaplegic homolog 3

Pathway

- [Adherens junction](#)
- [Calcium signaling pathway](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [ErbB signaling pathway](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [Long-term potentiation](#)
- [Melanogenesis](#)
- [Neurotrophin signaling pathway](#)
- [Olfactory transduction](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [TGF-beta signaling pathway](#)
- [Wnt signaling pathway](#)
- [Wnt signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Alzheimer disease](#)
- [Anemia](#)
- [Asthma](#)
- [Bacteremia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Cerebral Amyloid Angiopathy](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Coronary Artery Disease](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Head and Neck Neoplasms](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Keloid](#)

- [Kidney Failure](#)
- [Liver Cirrhosis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroblastoma](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Osteoarthritis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)