PTK2B(phospho Y402) & PTK2B Protein Phosphorylation Antibody Pair

Catalog # DP0206 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 PTK2B pr otein, and the other against the specific Y402 phosphorylated site of PTK2B for use in <u>in situ Proximi</u> ty 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 staine d with dual recognition antibody pair set, rabbit polyclonal antibody 1:1200 and mouse monoclonal a ntibody 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-PTK2B Y402 rabbit polyclonal antibody (20 ul) In PBS, 150 mM NaCl, pH 7.4 (0.02% sodium azide, 50% glycerol) 2. PTK2B 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 tha w cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

• In situ Proximity Ligation Assay (Cell)

Gene Info — PTK2B	
Entrez GenelD	<u>2185</u>
Gene Name	PTK2B
Gene Alias	CADTK, CAKB, FADK2, FAK2, FRNK, PKB, PTK, PYK2, RAFTK
Gene Description	PTK2B protein tyrosine kinase 2 beta
Omim ID	<u>601212</u>
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a cytoplasmic protein tyrosine kinase which is involved in calcium-induced reg ulation of ion channels and activation of the map kinase signaling pathway. The encoded protein may represent an important signaling intermediate between neuropeptide-activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal act ivity. The encoded protein undergoes rapid tyrosine phosphorylation and activation in response to increases in the intracellular calcium concentration, nicotinic acetylcholine receptor activation, me mbrane depolarization, or protein kinase C activation. This protein has been shown to bind CRK-associated substrate, nephrocystin, GTPase regulator associated with FAK, and the SH2 domain of GRB2. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but I acks significant sequence similarity to kinases from other subfamilies. Four transcript variants en coding two different isoforms have been found for this gene. [provided by RefSeq
Other Designations	CAK beta OTTHUMP00000128275 OTTHUMP00000162913 calcium-dependent tyrosine kinase cell adhesion kinase beta focal adhesion kinase 2 proline-rich tyrosine kinase 2 protein kinase B protein tyrosine kinase 2 beta related adhesion focal tyrosine kinase

Pathway

- Calcium signaling pathway
- Chemokine signaling pathway
- GnRH signaling pathway
- Leukocyte transendothelial migration
- Natural killer cell mediated cytotoxicity



Disease

- <u>Cardiovascular Diseases</u>
- <u>Cell Transformation</u>
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- <u>HIV Infections</u>
- Hypertension
- Insulin Resistance
- Kidney Failure
- <u>Melanoma</u>
- Skin Neoplasms
- Tobacco Use Disorder