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PRODUCT DATASHEET

Anti-PYK2 (Tyr-402), Phosphospecific Antibody

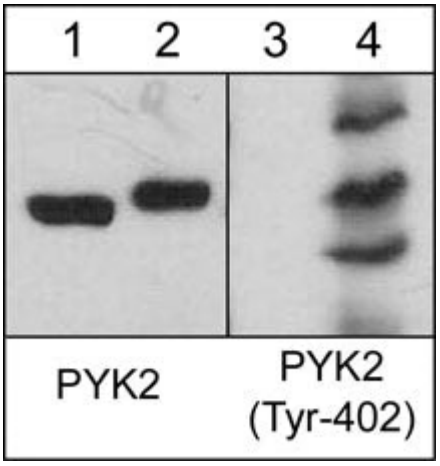
phosphosolutions ANTIBODIES THAT WORK

Product Details

Available Variants	100 µL (SKU:PM2691)
Conjugate	Unconjugated
Isotype	IgG1
Clone	M269
Gene Name	PTK2B
Host Species	Mouse
Format	Protein A Purified
Physical State	Liquid
Buffer	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000
Species Reactivity	Human, Mouse, Rat
Immunogen	Clone M269 was generated from a phosphopeptide containing amino acids surrounding tyrosine 402 in human PYK2. This sequence is conserved in rat and mouse PYK2, and has significant homology to the conserved site in FAK.
Specificity	The antibody detects a 116 kDa* band corresponding to PYK2 on SDS-PAGE immunoblots of human A431, Jurkat and K562 cells treated with pervanadate, but is not observed in control, untreated cells.
Molecular Weight	116
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

UniProt ID	Q14289 UniProt Summary: Non-receptor protein-tyrosine kinase that regulates reorganization of the actin cytoskeleton, cell polarization, cell migration, adhesion, spreading and bone remodeling. Plays a role in the regulation of the humoral immune response, and is required for normal levels of marginal B-cells in the spleen and normal migration of splenic B-cells. Required for normal macrophage polarization and migration towards sites of inflammation. Regulates cytoskeleton rearrangement and cell spreading in T-cells, and contributes to the regulation of T-cell responses. Promotes osteoclastic bone resorption; this requires both PTK2B/PYK2 and SRC. May inhibit differentiation and activity of osteoprogenitor cells. Functions in signaling downstream of integrin and collagen receptors, immune receptors, G-protein coupled receptors (GPCR), cytokine, chemokine and growth factor receptors, and mediates responses to cellular stress. Forms multisubunit signaling complexes with SRC and SRC family members upon activation; this leads to the phosphorylation of additional tyrosine residues, creating binding sites for scaffold proteins, effectors and substrates. Regulates numerous signaling pathways. Promotes activation of phosphatidylinositol 3-kinase and of the AKT1 signaling cascade. Promotes activation of NOS3. Regulates production of the cellular messenger cGMP. Promotes activation of the MAP kinase signaling cascade, including activation of MAPK1/ERK2, MAPK3/ERK1 and MAPK8/JNK1. Promotes activation of Rho family GTPases, such as RHOA and RAC1. Recruits the ubiquitin ligase MDM2 to P53/TP53 in the nucleus, and thereby regulates P53/TP53 activity, P53/TP53 ubiquitination and proteasomal degradation. Acts as a scaffold, binding to both PDPK1 and SRC, thereby allowing SRC to phosphorylate PDPK1 at 'Tyr-9, 'Tyr-373', and 'Tyr-376'. Promotes phosphorylation of NMDA receptors by SRC family members, and thereby contributes to the regulation of NMDA receptor ion channel activity and intracellular Ca(2+) levels. May also regulate potassium ion transport by phosphorylation of potassium channel subunits. Phosphorylates SRC; this increases SRC kinase activity. Phosphorylates ASAP1, NPHP1, KCNA2 and SHC1. Promotes phosphorylation of ASAP2, RHOU and PXN; this requires both SRC and PTK2/PYK2.
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
Post Translational Modification Type	Phosphorylated
NCBI Gene ID	2185

Product Images



Western blot analysis of human Jurkat cells untreated (lanes 1 & 3) or treated with pervanadate (1 mM) for 30 min. (lanes 2 & 4). The blot was probed with anti-PYK2 (C-terminal region) antibody (lanes 1 & 2) or anti-PYK2 (Tyr-402) (lanes 3 & 4).

Created on 21. November 2026 | All information without guarantee