

Anti-Phospho-PTK2 (Tyr397) Antibody (5N156)

Product Details

| | |
|---------------|-------------------------|
| Ig Type: | Rabbit IgG |
| Reactivity: | Human |
| Conjugation: | Unconjugated |
| Clone: | 5N156 |
| Purification: | Affinity-chromatography |

Applications

| | |
|--------------------|--|
| Western Blot | |
| Verified Activity: | -Positive WB detected in Hela whole cell lysate -All lanes Phospho-PTK2 antibody at 3.05µg/ml -Secondary: Goat polyclonal to rabbit IgG at 1/50000 dilution -Predicted band size: 119 KDa -Observed band size: 119 KDa |
| Application: | ELISA, WB |
| Recommended | WB:1:500-1:5000. |

Properties

| | |
|----------------------|---|
| Stability & Storage: | Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. |
| Shipping: | Shipping with blue ice. |

Antigen Details

| | |
|------------------|--|
| Immunogen: | A synthetic peptide: Human Phospho-PTK2 (Y397) |
| Antigen Species: | Human |
| Gene ID: | 5747 |
| Uniprot ID: | Q05397 |
| Synonyms: | PTK2 (p-Tyr397);Protein tyrosine kinase 2;p-PTK2 (Y397);Focal adhesion kinase 1;Phospho-PTK2 (Y397);FRNK;p125FAK;PTK2 (p-Y397);FADK;FAK1;PPP1R71;Protein phosphatase 1 regulatory subunit 71;FADK 1;Focal adhesion kinase related nonkinase;Focal adhesion kinase isoform FAK Del33;Focal adhesion Kinase;FAK related non kinase polypeptide;PTK2 protein tyrosine kinase 2;p-PTK2 (Tyr397);pp125FAK |
| Biology Area: | Cardiovascular |

Research Background

Non-receptor protein-tyrosine kinase that plays an essential role in regulating cell migration, adhesion, spreading, reorganization of the actin cytoskeleton, formation and disassembly of focal adhesions and cell protrusions, cell cycle progression, cell proliferation and apoptosis. Required for early embryonic development and placenta development. Required for embryonic angiogenesis, normal cardiomyocyte migration and proliferation, and normal heart development. Regulates axon growth and neuronal cell migration, axon branching and synapse formation; required for normal development of the nervous system. Plays a role in osteogenesis and differentiation of

osteoblasts. Functions in integrin signal transduction, but also in signaling downstream of numerous growth factor receptors, G-protein coupled receptors (GPCR), EPHA2, netrin receptors and LDL receptors. 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 the AKT1 signaling cascade. Promotes activation of MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling cascade. Promotes localized and transient activation of guanine nucleotide exchange factors (GEFs) and GTPase-activating proteins (GAPs), and thereby modulates the activity of Rho family GTPases. Signaling via CAS family members mediates activation of RAC1. Recruits the ubiquitin ligase MDM2 to P53/TP53 in the nucleus, and thereby regulates P53/TP53 activity, P53/TP53 ubiquitination and proteasomal degradation. Phosphorylates SRC; this increases SRC kinase activity. Phosphorylates ACTN1, ARHGEF7, GRB7, RET and WASL. Promotes phosphorylation of PXN and STAT1; most likely PXN and STAT1 are phosphorylated by a SRC family kinase that is recruited to autophosphorylated PTK2/FAK1, rather than by PTK2/FAK1 itself. Promotes phosphorylation of BCAR1; GIT2 and SHC1; this requires both SRC and PTK2/FAK1. Promotes phosphorylation of BMX and PIK3R1. Isoform 6 (FRNK) does not contain a kinase domain and inhibits PTK2/FAK1 phosphorylation and signaling. Its enhanced expression can attenuate the nuclear accumulation of LPXN and limit its ability to enhance serum response factor (SRF)-dependent gene transcription. Isoform 6 (FRNK) does not contain a kinase domain and inhibits PTK2/FAK1 phosphorylation and signaling. Its enhanced expression can attenuate the nuclear accumulation of LPXN and limit its ability to enhance serum response factor (SRF)-dependent gene transcription.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481