

Mouse Ptk6 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP14924a**Specification**

Mouse Ptk6 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q64434](#)**Mouse Ptk6 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 20459**Other Names**

Protein-tyrosine kinase 6, SRC-related intestinal kinase, Ptk6, Sik

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Ptk6 Antibody (N-term) Blocking Peptide - Protein Information**Name** Ptk6**Synonyms** Sik**Function**

Non-receptor tyrosine-protein kinase implicated in the regulation of a variety of signaling pathways that control the differentiation and maintenance of normal epithelia, as well as tumor growth. Function seems to be context dependent and differ depending on cell type, as well as its intracellular localization. A number of potential nuclear and cytoplasmic substrates have been identified. These include the RNA-binding proteins: KHDRBS1/SAM68, KHDRBS2/SLM1, KHDRBS3/SLM2 and SFPQ/PSF; transcription factors: STAT3 and STAT5A/B and a variety of signaling molecules: ARHGAP35/p190RhoGAP, PXN/paxillin, BTK/ATK, STAP2/BKS. Associates also with a variety of proteins that are likely upstream of PTK6 in various signaling pathways, or for which PTK6 may play an adapter-like role. These proteins include ADAM15, EGFR, ERBB2, ERBB3 and IRS4. In normal or non- tumorigenic tissues, PTK6 promotes cellular differentiation and apoptosis. In tumors PTK6 contributes to cancer progression by sensitizing cells to mitogenic signals and enhancing proliferation, anchorage-independent survival and migration/invasion. Association with EGFR, ERBB2, ERBB3 may contribute to mammary tumor development and growth through enhancement of EGF-induced signaling via BTK/AKT and PI3 kinase. Contributes to migration and proliferation by contributing to EGF-mediated phosphorylation of ARHGAP35/p190RhoGAP, which promotes association with RASA1/p120RasGAP, inactivating RhoA

while activating RAS. EGF stimulation resulted in phosphorylation of PNX/Paxillin by PTK6 and activation of RAC1 via CRK/CrKII, thereby promoting migration and invasion. PTK6 activates STAT3 and STAT5B to promote proliferation. Nuclear PTK6 may be important for regulating growth in normal epithelia, while cytoplasmic PTK6 might activate oncogenic signaling pathways.

Cellular Location

Cytoplasm. Nucleus. Membrane. Cell projection, ruffle. Note=Also found to be membrane-associated Colocalizes with KHDRBS1, within the nucleus

Tissue Location

Expressed only in epithelial tissues, including the skin and lining of the alimentary canal. Restricted to the cell layers immediately above the proliferative cell zone in these epithelia

Mouse Ptk6 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

Mouse Ptk6 Antibody (N-term) Blocking Peptide - Images**Mouse Ptk6 Antibody (N-term) Blocking Peptide - Background**

Phosphorylates KHDRBS2, KHDRBS3 and STAP2/BKS (By similarity). Phosphorylates KHDRBS1. May function as an intracellular signal transducer in epithelial tissues.

Mouse Ptk6 Antibody (N-term) Blocking Peptide - References

Zheng, Y., et al. Mol. Cell. Biol. 30(17):4280-4292(2010)Palka-Hamblin, H.L., et al. J. Cell. Sci. 123 (PT 2), 236-245 (2010) :Xiang, B., et al. Proc. Natl. Acad. Sci. U.S.A. 105(34):12463-12468(2008)Whitehead, R.H., et al. J. Gastroenterol. Hepatol. 23 (7 PT 1), 1119-1124 (2008) :Haegebarth, A., et al. Mol. Cell. Biol. 26(13):4949-4957(2006)