

## **BMX Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP7698c

## **Specification**

# **BMX Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

P51813

# **BMX Antibody (Center) Blocking Peptide - Additional Information**

Gene ID 660

#### **Other Names**

Cytoplasmic tyrosine-protein kinase BMX, Bone marrow tyrosine kinase gene in chromosome X protein, Epithelial and endothelial tyrosine kinase, ETK, NTK38, BMX

# **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP7698c>AP7698c</a> was selected from the Center region of human BMX . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **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.

### **BMX Antibody (Center) Blocking Peptide - Protein Information**

### **Name BMX**

## **Function**

Non-receptor tyrosine kinase that plays central but diverse modulatory roles in various signaling processes involved in the regulation of actin reorganization, cell migration, cell proliferation and survival, cell adhesion, and apoptosis. Participates in signal transduction stimulated by growth factor receptors, cytokine receptors, G-protein coupled receptors, antigen receptors and integrins. Induces tyrosine phosphorylation of BCAR1 in response to integrin regulation. Activation of BMX by integrins is mediated by PTK2/FAK1, a key mediator of integrin signaling events leading to the regulation of actin cytoskeleton and cell motility. Plays a critical role in TNF-induced angiogenesis, and implicated in the signaling of TEK and FLT1 receptors, 2 important receptor families essential for angiogenesis. Required for the phosphorylation and activation of STAT3, a transcription factor involved in cell differentiation. Also involved in interleukin-6 (IL6) induced differentiation. Also plays a role in programming adaptive cytoprotection against extracellular stress in different cell



systems, salivary epithelial cells, brain endothelial cells, and dermal fibroblasts. May be involved in regulation of endocytosis through its interaction with an endosomal protein RUFY1. May also play a role in the growth and differentiation of hematopoietic cells; as well as in signal transduction in endocardial and arterial endothelial cells.

# **Cellular Location**

Cytoplasm. Note=Localizes to the edges of spreading cells when complexed with BCAR1

#### **Tissue Location**

Highly expressed in cells with great migratory potential, including endothelial cells and metastatic carcinoma cell lines

## **BMX Antibody (Center) Blocking Peptide - Protocols**

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

#### Blocking Peptides

BMX Antibody (Center) Blocking Peptide - Images

## BMX Antibody (Center) Blocking Peptide - Background

Tyrosine kinases are either receptor molecules, which contain transmembrane and extracellular domains, or nonreceptor proteins, which are located intracellularly. One family of nonreceptor TKs includes the genes TEC (MIM 600583), TXK (MIM 600058), ITK (MIM 186973), and BTK (MIM 300300). All of these proteins are homologs of the Drosophila Src28 TK and contain an SH3 and SH2 domain upstream of the TK domain.[supplied by OMIM]

## **BMX Antibody (Center) Blocking Peptide - References**

Pan, S., et al., Mol. Cell. Biol. 22(21):7512-7523 (2002).Qiu, Y., et al., Proc. Natl. Acad. Sci. U.S.A. 95(7):3644-3649 (1998).Tamagnone, L., et al., Oncogene 9(12):3683-3688 (1994).