

## **BMX Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7698c

## Specification

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

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>P51813</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 78011 212-242

## **BMX Antibody (Center) - 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

This BMX antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 212-242 amino acids from the Central region of human BMX.

Dilution IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

BMX Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**BMX Antibody (Center) - Images** 





The anti-BMX Pab (Cat. #AP7698c) is used in Western blot to detect BMX in mouse heart tissue lysate.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

# BMX Antibody (Center) - 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) - 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).