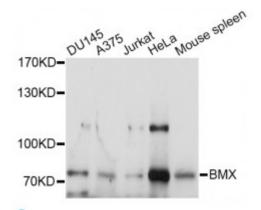


## **Anti-BMX Antibody**





**Description** This gene encodes a non-receptor tyrosine kinase belonging to the Tec

kinase family. The protein contains a PH-like domain, which mediates membrane targeting by binding to phosphatidylinositol 3,4,5-triphosphate (PIP3), and a SH2 domain that binds to tyrosine-phosphorylated proteins and functions in signal transduction. The protein is implicated in several signal transduction pathways including the Stat pathway, and regulates differentiation and tumorigenicity of several types of cancer cells. Alternatively spliced transcript variants have been found for this gene.

Model STJ117827

**Host** Rabbit

Reactivity Human, Mouse

**Applications** WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1-120 of human BMX (NP\_001712.1).

**Gene ID** <u>660</u>

Gene Symbol BMX

**Dilution range** WB 1:500 - 1:2000

Tissue Specificity Highly expressed in cells with great migratory potential, including endothelial

cells and metastatic carcinoma cell lines

**Purification** Affinity purification

**Note** For Research Use Only (RUO).

**Protein Name** Cytoplasmic tyrosine-protein kinase BMX

Molecular Weight 78.011 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

**Storage Instruction** Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:1079OMIM:300101Reactome:R-HSA-111465

Alternative Names Cytoplasmic tyrosine-protein kinase 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, Plays also 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

**Cellular Localization** Cytoplasm,

**Post-translational** Phosphorylated in response to protein I/II and to LPS, Phosphorylation at Modifications Tyr-566 by SRC and by autocatalysis leads to activation and is required for

Tyr-300 by Sixe and by autocatarysis leads to activation and is required to

STAT3 phosphorylation by BMX,

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