

BMX, Active recombinant protein

BMX, Cytoplasmic tyrosine-protein kinase BMX Catalog # PBV11308r

Specification

BMX, Active recombinant protein - Product info

Primary Accession	<u>P51813</u>
Concentration	0.1
Calculated MW	110.0 kDa KDa

BMX, Active recombinant protein - Additional Info

Gene ID 660 Gene Symbol BMX Other Names BMX, Cytoplasmic tyrosine-protein kinase BMX, Bone marrow tyrosine kinase gene in chromosome X protein, Epithelial and endothelial tyrosine kinase, NTK38

Source Assay&Purity Assay2&Purity2 Recombinant Format Liquid

Baculovirus (Sf9 insect cells) SDS-PAGE; ≥80% HPLC; Yes

Storage

-80°C; Recombinant protein in storage buffer (50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1 mM PMSF, 25% glycerol).

BMX, Active recombinant protein - Protocols

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

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

BMX, Active recombinant protein - Images

BMX, Active recombinant protein - Background

The BMX gene encodes a novel non receptor tyrosine kinase, which may play a role in the growth and differentiation of hematopoietic cells (1). Bmx cDNA comprises a long open reading frame of 675 amino acids, containing one SH3, one SH2 and one tyrosine kinase domain, which are about



70% identical with Btk, Itk and Tec and somewhat less with Txk tyrosine kinase sequences. The amino terminal sequences of these four tyrosine kinases are about 40% identical and each contains a so-called pleckstrin homology (PH) domain. The 2.7 kb Bmx mRNA is expressed in endothelial cells and several human tissues by Northern blotting and an 80 kD Bmx polypeptide was detected in human endothelial cells. The BMX gene is located in chromosomal band Xp22.2 between the DXS197 and DXS207 loci. Interestingly, chromosome X also contains the closest relative of BMX, the BTK gene, implicated in X-linked aγglobulinemia. Bmx, is found to induce activation of the Stat signaling pathway (3). Bmx induced the tyrosine phosphorylation and DNA binding activity of all the Stat factors tested, including Stat1, Stat3, and Stat5, both in mammalian and insect cells. Bmx also induced transcriptional activation of Stat1- and Stat5-dependent reporter genes.

BMX, Active recombinant protein - References

Tamagnone L., et al.Oncogene 9:3683-3688(1994). Qiu Y., et al.Proc. Natl. Acad. Sci. U.S.A. 95:3644-3649(1998). Ross M.T., et al.Nature 434:325-337(2005). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Nore B.F., et al.Biochim. Biophys. Acta 1645:123-132(2003).