# SANTA CRUZ BIOTECHNOLOGY, INC.

# Emt (1-109): sc-4119 WB



# BACKGROUND

The Btk family of non-receptor tyrosine kinases is composed of six proteins designated Tec, Emt (also known as Itk or Tsk), Btk (previously known as Atk, BPK or Emb), Bmx, Txk (also known as Rlk) and Dsrc28C. All members of the family contain SH3 and SH2 domains and, with the exception of Txk and Dsrc28C, also contain a pleckstrin homology (PH) and a Tec homology (TH) domain in their amino termini Four alternatively spliced forms of Tec are found to be expressed broadly in cells of hematopoietic lineage and hepatocytes. The 72 kDa Emt gene product associates with CD28 and becomes activated subsequent to CD28 ligation. Btk is necessary for proper B cell development, and mutations in the gene encoding Btk have been associated with families suffering from X-linked agammaglobulinemia, also referred to as Bruton's disease. The 80 kDa Bmx protein shares a high degree of homology with Btk and seems to be expressed at highest levels in the heart. Txk expression is T cell-specific, while expression of the *Drosophila* Tec homolog, Dsrc28C, is developmentally regulated.

# REFERENCES

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#### SOURCE

Emt (1-109) is expressed in *E. coli* as a 40 kDa tagged fusion protein corresponding to amino acid 1-109 of Emt of mouse origin.

# **STORAGE**

Store at -20° C; stable for one year from the date of shipment.

# PRODUCT

Emt (1-109) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10  $\mu$ g in 0.1 ml SDS-PAGE loading buffer.

# **APPLICATIONS**

Emt (1-109) is suitable as a Western blotting control for sc-1697 and sc-7484.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.