Mouse PTK6 / Brk Protein (His & GST Tag)

Catalog Number: **50710-M20B**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

BRK; Sik; tks; Tksk

Protein Construction:

A DNA sequence encoding the mouse PTK6 (Q64434) (Met1-Val451) was expressed with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Source: Mouse

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

The specific activity was determined to be 5 nmol/min/mg using poly [Glu, Tyr] 4:1 as substrate.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met

Molecular Mass:

The recombinant mouse PTK6/GST chimera consists of 688 amino acids and has a calculated molecular mass of 79.8 kDa. The recombinant protein migrates as an approximately 66 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Supplied as sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

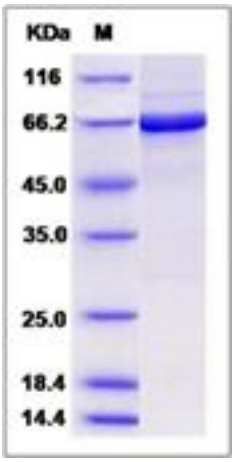
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Tyrosine kinase (PTKs) is a protein that carry out tyrosine phosphorylation, which play a fundamental role in cell proliferation, survival, adhesion, and motility and have also been demenstrated to mediate malignant cell transformation. Overexpression of this protein in mammary epithelial cells leads to sensitization of the cells to epidermal growth factor and results in a partially transformed phenotype. Two classes of PTKs are present in cells: the transmembrane receptor PTKs and the non-receptor PTKs. Tyrosine kinase(PTKs)-6/ BRK is a cytoplasmic non-receptor protein kinase which may function as an intracellular signal transducer in epithelial tissues. Tyrosine kinase(PTKs)-6/ BRK has been shown to undergo autophosphorylation. It has been found that the constitutive expression of the tyrosine kinase(PTKs)-6/ BRK is in a large proportion of cutaneous T-cell lymphomas and other transformed T- and B-cell populations. State BRK expression was also induced in normal T-cells. In clinical, the cytoplasmic tyrosine kinase PTK6 (BRK) shows elevated expression in approximately two-thirds of primary breast tumours, and is implicated in EGF receptor-dependent signalling and epithelial tumorigenesis.

References

1.Aubele M, *et al.* (2008) Prognostic value of protein tyrosine kinase 6 (PTK6) for long-term survival of breast cancer patients.British Journal of Cancer. 99: 1089-95. 2.Kasprzycka M, *et al.* (2006) Expression and oncogenic role of Brk (PTK6/sik) protein tyrosine kinase in lymphocytes. American Journal of Pathology. 168: 1631-41. 3.Hubbard SR, *et al.* (2000) Protein tyrosine kinase structure and function. Annual review of biochemistry. 69: 373-98.