

MST4 Protein, Human, Recombinant (GST)

General Information

Synonyms:	serine/threonine protein kinase 26;MST4;MASK
Protein Construction:	A DNA sequence encoding the human MST4 isoform 1 (NP_057626.2) (Met 1-Pro 416) was expressed with the fused GST tag at N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q9P289-1
Molecular Weight:	73 kDa (predicted); 65 kDa (reducing conditions)

QC Testing

Biological Activity:	The specific activity was determined to be 15 nmol/min/mg using MBP as substrate.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Supplied as sterile 50 mM Tris, 100 mM NaCl, pH 8.0, 25% glycerol, 0.6 mM GSH, 0.5 mM PMSF, 0.5 mM EDTA, 2 mM DTT.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein Background

MST4, also known as mammalian STE2-like protein kinase 4, is a novel member of the germinal center kinase subfamily of human Ste2-like kinases and is closely related to MST3. The 416 amino acid full-length MST4 contains a C-terminal regulatory domain and an N-terminal kinase domain, both of which are required for full activation of the kinase. MST4 is highly expressed in the placenta, thymus, and peripheral blood leukocytes. MST4 specifically activates ERK but not JNK or p38 MAPK in transiently transfected cells or stable cell lines, and thus is biologically active in the activation of the MEK/ERK pathway mediating cell growth and transformation. Further, MST4 kinase activity is stimulated significantly by epidermal growth factor receptor (EGFR) ligands, which are known to promote the growth of certain cancer cells. Accordingly, MST4 has a potential role in signal transduction pathways

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involved in cancer progression. Three alternatively spliced isoforms of MST4 have been isolated, and isoform 3 lacks an exon encoding kinase domain and may function as a dominant-negative regulator of the MST4 kinase.

Reference

- Qian, et al., 2001, J Biol Chem. 276 :22439-45.2.
Lin, JL. et al., 2001, Oncogene. 20: 6559-6569.
Sung V, et al., 2003, Cancer research. 63: 3356-63.4.
Ma, X. et al., 2007, Molecular biology of the cell. 18:1965-78.5.
ten Klooster JP, et al., 2009, Developmental cell. 16:551-62.

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