

## Recombinant Human MST4 Protein (GST Tag)

Catalog Number: PKSH030401

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

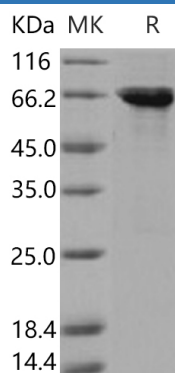
### Description

<b>Species</b>	Human
<b>Source</b>	Baculovirus-Insect Cells-derived Human MST4 protein Met 1-Pro 416, with an N-terminal GST
<b>Calculated MW</b>	73.0 kDa
<b>Observed MW</b>	65 kDa
<b>Accession</b>	NP_057626.2
<b>Bio-activity</b>	The specific activity was determined to be 15 nmol/min/mg using MBP as substrate.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Concentration</b>	Subject to label value.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
<b>Formulation</b>	Supplied as sterile solution of 50mM Tris, 100mM NaCl, pH 8.0, 25% glycerol, 0.6mM GSH, 0.5mM PMSF, 0.5mM EDTA, 2mM DTT

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

MST4, also known as mammalian STE20-like protein kinase 4, is a novel member of the germinal center kinase subfamily of human Ste20-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 placenta, thymus, and peripheral blood leukocytes. MST4 specifically activates ERK but not JNK or p38 MAPK in transiently transfected cells or in stable cell lines, and thus is biologically active in the activation of 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 growth of certain cancer cells. Accordingly, MST4 has a potential role in signal transduction pathways 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.

### For Research Use Only

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