# **Recombinant Human MKNK1 Kinase**



Catalog No.: RP03438LQ Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot Human 8569 O9BUB5

Tags N-GST

**Synonyms** 

MKNK1; MNK1; MAPK signal-integrating kinase 1; MAP kinase-interacting serine/threonine-protein kinase 1

# **Product Information**

SourcePurificationBaculovirus-Insect≥ 85% asCellsdetermined by

determined by SDS-PAGE;≥ 85% as determined by HPLC.

Calculated MW Observed MW

73.9 kDa 60-80 kDa

#### **Endotoxin**

< 1 EU/µg of the protein by LAL method.

## **Formulation**

Supplied as a 0.22  $\mu$ m filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 10% glycerol, 0.05% Brij, 1 mM DTT. (pH 7.5). Contact us for customized product form or formulation.

#### Reconstitution

Please use running water to thaw it quickly.

## **Contact**

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# **Background**

MAP kinase-interacting serine/threonine-protein kinase 1 is an enzyme that in humans is encoded by the MKNK1 gene. MKNK1 has been shown to interact with MAPK1 and Eukaryotic translation initiation factor 4 gamma. Humans have 2 genes encoding MNKs, Mknk1 and Mknk2, that encode the proteins MNK1 and MNK2, which differ in their regulation and other properties. MNK1 activity is tightly controlled by ERK and p38 MAP kinase signalling, and MNK2 displays high basal activity. The only validated in vivo MNK substrate is eukaryotic translation initiation factor (eIF4E), which it phosphorylates on Ser209.

### **Basic Information**

#### **Description**

Recombinant Human MKNK1 Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Met1-Leu424) of Human MKNK1 (Accession #Q9BUB5) fused with a N-GST tag.

#### **Bio-Activity**

The activity of MKNK1 is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

#### Storage

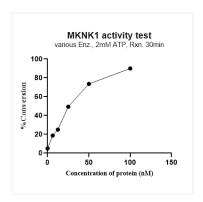
Store at -70°C. This product is stable at  $\leq$  -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10  $\mu\text{L}$  are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

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Recombinant Human MKNK1 Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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