

# Recombinant Human ERK1/MAPK3 Kinase

Catalog No.: RP03300LQ Recombinant

# **Sequence Information**

Species Gene ID Swiss Prot Human 5595 P27361

Tags N-GST

**Synonyms** 

ERK1; MAPK3; ERT2; PRKM3; p44MAPK; p44ERK1; MAP kinase 3; Mitogenactivated protein kinase 3; Extracellular signal-regulated kinase 1; MAP kinase isoform p44

# **Product Information**

Source F
Baculovirus-Insect ≥
Cells d

Purification
≥ 90 % as
determined by SDS-

PAGE.

Calculated MW Observed MW 68.49 kDa 60-70 kDa

00.45 KDu

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

### **Formulation**

**Endotoxin** 

Supplied as a 0.22  $\mu$ m filtered solution in 50 mM Tris-HCl, 200 mM NaCl, 20% glycerol, 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**

Mitogen-activated protein kinase 3, also known as p44MAPK and ERK1, is an enzyme that in humans is encoded by the MAPK3 gene. ERK1/MAPK3 is a serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAP kinases act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets.

# **Basic Information**

### **Description**

Recombinant Human ERK1/MAPK3 Protein is produced by Baculovirus-Insect cells expression system. The target protein is expressed with sequence (Ala2-Pro379) of human ERK1/MAPK3 (Accession #P27361) fused with GST tag at the N-terminus.

### **Bio-Activity**

The activity of ERK1 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**

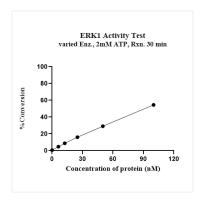
Store at -70°C. This product is stable at  $\leq$  -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

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 ERK1/MAPK3 Kinase was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.



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