

# Recombinant Human ERK1/MAPK3 Protein

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; Mitogen-activated protein kinase 3; Extracellular signal-regulated kinase 1; MAP kinase isoform p44

## Product Information

Source	Purification
Baculovirus-Insect Cells	> 90% by SDS-PAGE.

Calculated MW	Observed MW
68.49 kDa	60-70 kDa

### Endotoxin

< 1.0 EU/μg of the protein by LAL method.

### Formulation

Supplied as a 0.22 μm 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

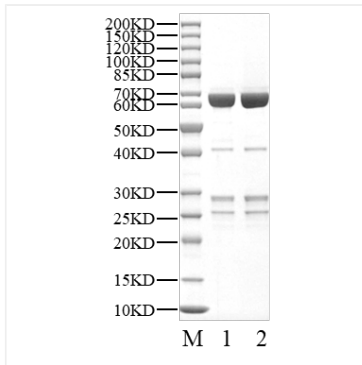
The activity of ERK1 is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

### Storage

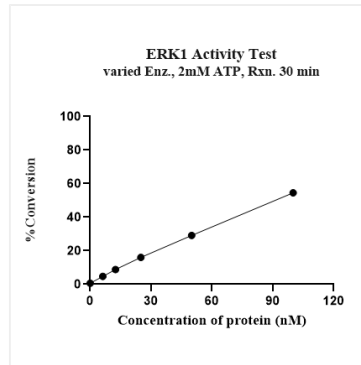
Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

## Validation Data



Recombinant Human ERK1/MAPK3 Protein was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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