Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Recombinant Human ERK2/MAPK1 Kinase

Catalog No.: RP03390LQ Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
Human	5594	P28482

Tags
N-Flag-His

Synonyms
MAPK1; ERK2; PRKM1; PRKM2; ERK-2; p42-MAPK; Mitogen-activated protein kinase 1; Extracellular signal-regulated kinase 2

Product Information

Source	Purification
E. coli	≥ 90 % as determined by SDS-PAGE;≥ 90 % as determined by HPLC.

Calculated MW	Observed MW
44.2 kDa	35-45 kDa

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

Formulation
Supplied as a 0.22 μm filtered solution in 50 mM HEPES, 150 mM NaCl, 5% glycerol. (pH 7.5). Contact us for customized product form or formulation.

Reconstitution
Please use running water to thaw it quickly.

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Background

Mitogen-activated protein kinase 1 (MAPK 1), also known as ERK2, is an enzyme that in humans is encoded by the MAPK1 gene. ERK2 is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene. MAPK1 contains multiple amino acid sites that are phosphorylated and ubiquitinated.

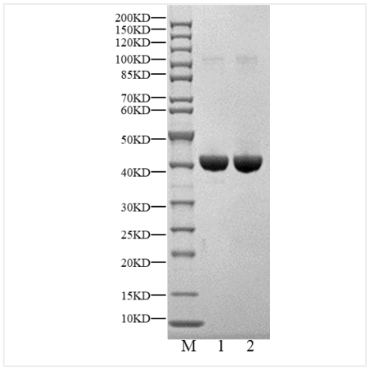
Basic Information

Description
Recombinant Human ERK2/MAPK1 Kinase is produced by E. coli expression system. The target protein is expressed with sequence (Met1-Ser360) of Human MAPK1 (Accession #P28482) fused with a N-Flag-His tag.

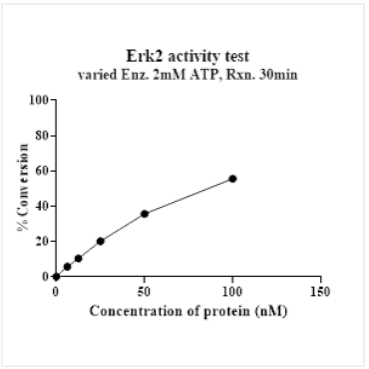
Bio-Activity
The activity of ERK2 is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

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 ERK2/MAPK1 Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



The activity of ERK2 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.