

## 32-3047: MAPK1 Active Recombinant Protein

**Alternative Name :** Mitogen-activated protein kinase 1, EC 2.7.11.24, Extracellular signal-regulated kinase 2, ERK-2, Mitogen-activated protein kinase 2, MAP kinase 2, MAPK 2, p42-MAPK, ERT1, ERK, p38, p40, p41, ERK2, MAPK2, PRKM1, PRKM2, P42MAPK, p41mapk.

### Description

Source : Escherichia Coli. MAPK1 Human Recombinant is a non-glycosylated full length chain containing amino acids Met1-Ser360 and having a calculated molecular mass of 41,762 Dalton. MAPK1 is purified by proprietary chromatographic techniques. Mitogen-activated protein kinase 1 (MAPK1) is also known as 'extracellular signal-regulated kinase 2' (ERK2). Two similar (85% sequence identity) protein kinases were originally called ERK1 and ERK2. They were found during a search for protein kinases that are rapidly phosphorylated after activation of cell surface tyrosine kinases such as the epidermal growth factor receptor. Phosphorylation of ERKs leads to the activation of their kinase activity. The molecular events linking cell surface receptors to activation of ERKs are complex. It was found that RasGTP-binding proteins are involved in the activation of ERKs. Another protein kinase, Raf-1, was shown to phosphorylate a 'MAPK kinase', thus qualifying as a 'MAPK kinase kinase'. The MAPK kinase was named 'MAPK/ERK kinase' (MEK). Receptor-linked tyrosine kinases, Ras, Raf, MEK and MAPK could be fitted into a signaling cascade linking an extracellular signal to MAPK activation. Transgenic gene knockout mice lacking MAPK1 have major defects in early development.

### Product Info

**Amount :** 5 µg  
**Purification :** The purity is greater than 95%.  
**Content :** MAPK1 protein solution is supplied in 50mM HEPES pH 7.5, 100mM NaCl, 5mM DTT and 20% glycerol.  
**Storage condition :** Store vial at -20°C to -80°C. Avoid multiple freeze-thaw cycles.  
**Amino Acid :** maaaaaagag pemvrgqvfd vgptrytnlsy igegaygmvc saydvnkvrv vaikkispfe hqtycqrtr eikillrfrh eniigindii raptieqmkd vyivqdlmet dlykllktqh lsndhicyfl yqilrglkyi hsanvlhrdl kpsnllntt cdlkicdfgl arvadpdhdh tgfiteyvat rwyrapeiml nskgytsid iwsvgcila mlsnrpifpg khyldqlnhi lgilgspseq dlnciinlka rnyllslphk nkvpwnrlfp nadskaldll dkmltnphk rieveqalah pyleqyydps depiaepfk fdmeldldpk eklkelifee tarfqpgyrs.

