

Product datasheet for **TP750214**

ERK2 (MAPK1) (NM_002745) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human Mitogen-activated protein kinase 1, full length(105Gly), with N-terminal fusion HA/FLAG tag, expressed in E.coli, 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	1 EQKLISEEDL AANDILDYKD DDDKMAAAAA AGAGPEMVRG QVFDVGPRYT NLSYIGEGAY 61 GMVCSAYDNV NKVRVAIKI SPFEHQTYCQ RTLREIKILL RFRHENIIGI NDIIRAPTIE 121 QMKDVYIVGD LMETDLYKLL KTQHLSNDHI CYFLYQILRG LKYIHSANVL HRDLKPSNLL 181 LNTTCDLKIC DFGLARVADP DHDHTGFLTE YVATRWRAP EIMLNSKGYT KSIDIWSVGC 241 ILAEMLSNRP IFPGKHYLDQ LNHILGILGS PSQEDLNCII NLKARNYLLS LPHKNKVPWN 301 RLFPNADSKA LDLLDKMLTF NPHKRIEVEQ ALAHPYLEQY YDPSDEPIAE APFKFDMELD 361 DLPKEKLEL IFEETARFQP GYRS
Tag:	N-FUSION
Predicted MW:	44.1 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	50 mM Tris-HCl, pH 8.0, 500 mM NaCl, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_002736
Locus ID:	5594
UniProt ID:	P28482 , Q1HBJ4 , Q499G7
Cytogenetics:	22q11.22
Synonyms:	ERK; ERK-2; ERK2; ERT1; MAPK2; NS13; p38; p40; p41; p41mapk; p42-MAPK; P42MAPK; PRKM1; PRKM2



[View online »](#)

Summary:

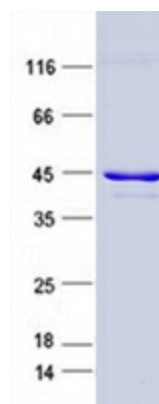
This gene encodes a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation 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. One study also suggests that this protein acts as a transcriptional repressor independent of its kinase activity. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene. [provided by RefSeq, Jan 2014]

Protein Families:

Druggable Genome, Protein Kinase

Protein Pathways:

Acute myeloid leukemia, Adherens junction, Alzheimer's disease, Axon guidance, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Non-small cell lung cancer, Oocyte meiosis, Pancreatic cancer, Pathways in cancer, Prion diseases, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, TGF-beta signaling pathway, Thyroid cancer, Toll-like receptor signaling pathway, Type II diabetes mellitus, Vascular smooth muscle contraction, VEGF signaling pathway

Product images:

Purified recombinant protein MAPK1 was analyzed by SDS-PAGE gel and Coomassie Blue Staining.