

## Product datasheet for TP304196L

### ERK1 (MAPK3) (NM\_002746) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human mitogen-activated protein kinase 3 (MAPK3), transcript variant 1, 1 mg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC204196 protein sequence <b>Red</b> =Cloning site <b>Green</b> =Tags(s)

MAAAAAQGGGGGEPRTTEGVGPGVPEVEMVKGQPFVGPRTYQLQYIGEGAYGMVSSAYDHRKTRVAI  
KKISPFHQTYCQRTLREIQILLRFRHENVIGIRDILRASTLEAMRDVYIVQDLMETDLYKLLKSQQLSN  
DHICYFLYQILRGLKYIHSANVLRDLKPSNLLINTTCDLKICDFGLARIADPEHDHTGFLTEYVATRWY  
RAPEIMLNSKGYTKSIDIWSVGCILAEMLSNRPIFGPKHYLDQLNHILGILGSPSQEDLNCIINMKARNY  
LQSLPSKTKVAWAKLFPKSDSKALDLLDRMLTFNPNKRITVEEALAHPLYEQYYDPTDEPVAAEPTFAM  
ELDDLPERLKERLKFQETARFQPGVLEAP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

Tag:	C-Myc/DDK
Predicted MW:	43 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
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.
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:	<a href="#">NP_002737</a>



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**Locus ID:** 5595

**UniProt ID:** [P27361](#), [L7RXH5](#)

**RefSeq Size:** 1902

**Cytogenetics:** 16p11.2

**RefSeq ORF:** 1137

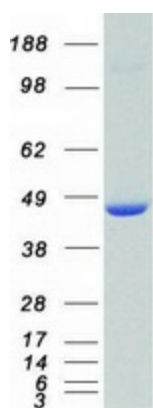
**Synonyms:** ERK-1; ERK1; ERT2; HS44KDAP; HUMKER1A; p44-ERK1; p44-MAPK; P44ERK1; P44MAPK; PRKM3

**Summary:** The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), 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. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, 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:



Coomassie blue staining of purified MAPK3 protein (Cat# [TP304196]). The protein was produced from HEK293T cells transfected with MAPK3 cDNA clone (Cat# [RC204196]) using MegaTran 2.0 (Cat# [TT210002]).