

Product datasheet for PH304196

ERK1 (MAPK3) (NM_002746) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	MAPK3 MS Standard C13 and N15-labeled recombinant protein (NP_002737)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC204196
Predicted MW:	43.1 kDa
Protein Sequence:	>RC204196 protein sequence Red=Cloning site Green=Tags(s)
	MAAAAAQGGGGGPRRTEGVGPGVPGEVEMVKGQPFVGVPRYTQLQYIGEGAYGMVSSAYDHVRKTRVAI KKISPFEHQTYCQRTLREIQILLRFRHENVIGIRDILRASTLEAMRDVYIVQDLMETDLKLLKSSQQLSN DHICYFLYQILRGLKYIHSANVLHRDLKPSNLLINTTCDLKICDFGLARIADPEHDHTGFLTEYVATRWY RAPEIMLNSKGYTKSIDIWSVGCILAEMLSNRPIFPGKHLYDQLNHILGILGSPSQEDLNCIINMKARNY LQSLPSKTKVAWAKLFPKSDSKALDLLDRMLTFNPNKRITVEEALAHVPYLEQYYDPTDEPVAEPPFTFAM ELDDLPKERLKEKELIFQETARFQPGVLEAP
	TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<u>NP_002737</u>
RefSeq Size:	1902
RefSeq ORF:	1137
Synonyms:	ERK-1; ERK1; ERT2; HS44KDAP; HUMKER1A; p44-ERK1; p44-MAPK; P44ERK1; P44MAPK; PRKM3
Locus ID:	5595



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

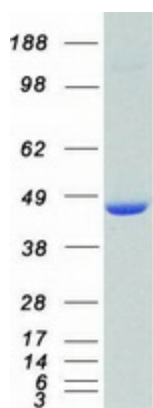
Cytogenetics: 16p11.2

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]).