

# Product datasheet for AR09328PU-N

### ERK2 (1-360, His-tag) Human Protein

#### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Recombinant Proteins
Description:	ERK2 (1-360, His-tag) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MAAAAAAGAG PEMVRGQVFD VGPRYTNLSY IGEGAYGMVC SAYDNVNKVR VAIKKISPFE HQTYCQRTLR EIKILLRFRH ENIIGINDII RAPTIEQMKD VYIVQDLMET DLYKLLKTQH LSNDHICYFL YQILRGLKYI HSANVLHRDL KPSNLLLNTT CDLKICDFGL ARVADPDHDH TGFLTEYVAT RWYRAPEIML NSKGYTKSID IWSVGCILAE MLSNRPIFPG KHYLDQLNHI LGILGSPSQE DLNCIINLKA RNYLLSLPHK NKVPWNRLFP NADSKALDLL DKMLTFNPHK RIEVEQALAH PYLEQYYDPS DEPIAEAPFK FDMELDDLPK EKLKELIFEE TARFQPGYRS
Tag:	His-tag
Predicted MW:	43.5 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant human MAPK1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP 002736</u>
Locus ID:	5594
UniProt ID:	<u>P28482</u>
Cytogenetics:	22q11.22



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	ERK2 (1-360, His-tag) Human Protein – AR09328PU-N
Synonyms:	Mitogen-activated protein kinase 1, p42-MAPK, ERT1, PRKM1, PRKM2, MAP kinase 2, MAPK2, MAPK1
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 Pathway	s: 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:



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