

Product datasheet for **RC219888**

ERK1 (MAPK3) (NM_001040056) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERK1 (MAPK3) (NM_001040056) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERK1
Synonyms:	ERK-1; ERK1; ERT2; HS44KDAP; HUMKER1A; p44-ERK1; p44-MAPK; P44ERK1; P44MAPK; PRKM3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219888 representing NM_001040056 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGCGGGCGGCTCAGGGGGGGGGGGGGAGCCCCGTAGAACCAGGGGGTTCGGCCCGGGG
TCCCGGGGAGGTGGAGATGGTGAAGGGGCGCCGTTTCGACGTGGGCCCGCGCTACACGCAGTTGCAGTA
CATCGGCGAGGGCGCGTACGGCATGGTCAGCTCGGCCTATGACCACGTGCGCAAGACTCGCGTGGCCATC
AAGAAGATCAGCCCTTGAACATCAGACCTACTGCCAGCGCACGCTCCGGGAGATCCAGATCCTGCTGC
GCTTCCGCATGAGAATGTCATCGGCATCCGAGACATTCTGCGGGCGTCCACCCTGGAAGCCATGAGAGA
TGCTACATTGTGACAGGACCTGATGGAGACTGACCTGTACAAGTTGCTGAAAAGCCAGCAGCTGAGCAAT
GACCATATCTGCTACTTCTCTACCAGATCCTGCGGGGCCTCAAGTACATCCACTCCGCCAACGTGCTCC
ACCGAGATCTAAAGCCCTCCAACCTGCTCATCAACACCACCTGCGACCTTAAGATTTGTGATTTCCGGCT
GGCCCGGATTGCCGATCCTGAGCATGACCACACCGGCTTCTGACGGAGTATGTGGCTACGCGCTGGTAC
CGGGCCCCAGAGATCATGCTGAACCTCAAGGGCTATACCAAGTCCATCGACATCTGGTCTGTGGGCTGCA
TTCTGGCTGAGATGCTCTAACC GGCCATCTTCCCTGGCAAGCACTACCTGGATCAGTCAACCACAT
TCTGGGATCCTGGGCTCCCCATCCCAGGAGGACTGAATTGTATCATCAACATGAAGGCCCGAAACTAC
CTACAGTCTTGGCCTCCAAGACCAAGGTGGCTTGGCCAAGCTTTTCCCAAGTCAGACTCCAAGGCC
TTGACCTGCTGGACCGGATGTTAACCTTTAACCCCAATAAACGGATCACAGTGGAGGAAGCGCTGGCTCA
CCCCTACCTGGAGCAGTACTATGACCCGACGGATGAGGTGGGCCAGTCCCCAGCAGCAGTGGGGCTGGG
GCAGGGGAGCAGGGGGCACG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001040056.3](#)

RefSeq Size: 2005 bp

RefSeq ORF: 1074 bp

Locus ID: 5595

UniProt ID: [P27361](#)

Cytogenetics: 16p11.2

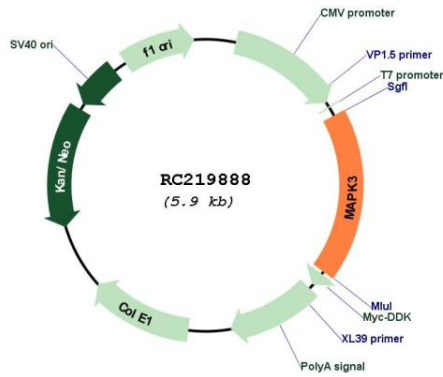
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

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

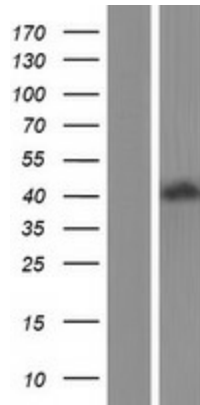
MW: 39.9 kDa

Gene 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]

Product images:



Circular map for RC219888



Western blot validation of overexpression lysate (Cat# [LY421885]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219888 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).