

Product datasheet for **RC204004**

ERK5 (MAPK7) (NM_139034) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERK5 (MAPK7) (NM_139034) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ERK5
Synonyms:	BMK1; ERK4; ERK5; PRKM7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC204004 representing NM_139034
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGAGCCTCTGAAGGAGGAAGACGGCGAGGACGGCTCTGCGGAGCCCCCGGGCCCGTGAAGGCCG
 AACCCGCCACACCGCTGCCTCTGTAGCGGCAAGAACCCTGGCCCTGCTTAAAGCCCGCTCCTTCGATGT
 GACCTTTGACGTGGGCGACGAGTACGAGATCATCGAGACCATAGGCAACGGGGCCTATGGAGTGGTGTC
 TCCGCCCGCCCGCCTCACCGGCCAGCAGGTGGCCATCAAGAAGATCCCTAATGCTTTCGATGTGGTGA
 CCAATGCCAAGCGGACCCTCAGGAGCTGAAGATCCTCAAGCACTTTAAACACGACAACATCATGCCAT
 CAAGGACATCCTGAGGCCACCGTGCCCTATGGCGAATCAAATCTGTCTACGTGGTCTGGACCTGATG
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 CCTATTGGTGAATGAGAACTGTGAGCTCAAGATTGGTACTTTGGTATGGCTCGTGGCCTGTGCACCTCG
 CCCGCTGAACATCAGTACTTCATGACTGAGTATGTGGCCACGCGCTGGTACCGTGCGCCCGAGCTCATGC
 TCTCTTTGCATGAGTATACACAGGCTATTGACCTCTGGTCTGTGGGCTGCATCTTTGGTGAAGTGTGGC
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 GCCAGCCTGTGCCCTGGGAGACAGTGTACCCAGGTGCCGACCGCCAGGCCCTATCACTGCTGGGTGCGAT
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 CATGATCCTGATGATGAGCCTGACTGTGCCCGCCCTTTGACTTTGCCTTTGACCGGAAGCCCTCACTC
 GGGAGCGCATTAAAGGAGCCATTGTGGCTGAAATTGAGGACTTCCATGCAAGCGCTGAGGGCATCCGCCA
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 AGTCCCTGGGCTCCAGTGGGACTGTGCCATGGAGTCTCCACCACCGCCCGCCACCATGCCCGGCC
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 GGAGGAATCTTAAACCAGTCTTTCGACATGGGCGTGGCTGATGGGCCACAGGATGGCCAGGCAGATTCA
 GCCTCTCTCAGCCTCCCTGCTTGTGACTGGCTCGAAGGCCATGGCATGAACCTGCCGATATTGAGT
 CCCTGCAGCGTGAGATCCAGATGGACTCCCAATGCTGTGGCTGACCTGCCTGACCTCCAGGACCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204004 representing NM_139034
 Red=Cloning site Green=Tags(s)

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MAEPLKEEDGEDGSAEPPGPVKAEP AHTAASVAAKNLALLKARSFDVTFDVGDEYEIIETIGNGAYGVVS
SARRRLTGQQVAIKKIPNAFDVVTNAKRTLRELKILKHFKHDNIIA IKDILRPTVPYGEFKSVYVLDLM
ESDLHQI IHSSQPLTLEHVRYFLYQLLRGLKYMHS AQVIHRDLKPSNLLVNENCELKIGDFGMARGLCTS
PAEHQYFMTEYVATRWRAP ELM SLHEYTQAIDLWSVGCIFGEM LARRQLFPGKNYVHQLQLIMMVLGT
PSPAVIQAVGAERV RAYIQSLPPRQPVPWETVYPGADRQAL SLLGRMLRFEPSARISAAAALRHPFLAKY
HDPDDEPDCAPPFDFAFDREALTRERIKEAIVAEIEDFHARREGIRQQIRFQPSLQPVASEPGCPDVEMP
SPWAPSGDCAMESPPPAPPPCPGPAPDTIDLTLQPPPPVSEPAPPKKGAI SDNTKAALKAALLKSLRSR
LRDGPSAPLEAPEPRKPVTAQERQREEREKRRRRQERAKEREKRRQERERKERGAGASGGPSTDPLAGLV
LSDNDRSLLERWTRMARPAAPALTSVPAPAPAPTPTPTPVQPTSPPPGPVAQPTGPQPQSAGSTSGPV PQ
PACPPPGPAPHPTGPPGPIPVAPPQIATSTSLLAQSLVPPPGLPGSSTPGVLPYFPPGLPPPDAGGAP
QSSMSESPDVNLVTQQLSKSQVEDPLPPVFSGTPKGSAGYGVGF DLEEF LNQSFDMGVADGPDGQADS
ASLSASLLADWLEGHGMNPADIESLQREIQMDS PMLLADLPDLQDP
  
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

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_139034.3](#)

RefSeq Size: 2813 bp

RefSeq ORF: 2451 bp

Locus ID: 5598

UniProt ID: [Q13164](#)

Cytogenetics: 17p11.2

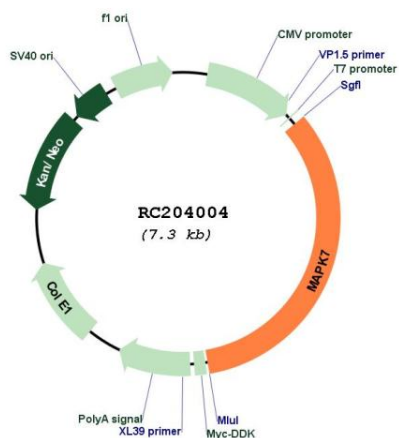
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Gap junction, GnRH signaling pathway, MAPK signaling pathway, Neurotrophin signaling pathway

MW: 88.2 kDa

Gene Summary: The protein encoded by this gene is a member of the MAP kinase family. MAP kinases 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. This kinase is specifically activated by mitogen-activated protein kinase kinase 5 (MAP2K5/MEK5). It is involved in the downstream signaling processes of various receptor molecules including receptor type kinases, and G protein-coupled receptors. In response to extracellular signals, this kinase translocates to cell nucleus, where it regulates gene expression by phosphorylating, and activating different transcription factors. Four alternatively spliced transcript variants of this gene encoding two distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204004