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Product datasheet for SC124923

ERK5 (MAPK7) (NM_139034) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERK5 (MAPK7) (NM_139034) Human Untagged Clone
Tag:	Tag Free
Symbol:	ERK5
Synonyms:	BMK1; ERK4; ERK5; PRKM7
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_139034, the custom clone sequence may differ by one or more nucleotides

ATGGCCGAGCCTCTGAAGGAGGAAGACGGCGAGGACGGCTCTGCGGAGCCCCCCGGGCCCGTGAAGGCCG
AACCCGCCCACACCGCTGCCTCTGTAGCGGCCAAGAACCTGGCCCTGCTTAAAGCCCGCTCCTTCGATGT
GACCTTTGACGTGGGCGACGAGTACGAGATCATCGAGACCATAGGCAACGGGGCCTATGGAGTGGTGTCC
TCCGCCCGCCGCCGCCTCACCGGCCAGCAGGTGGCCATCAAGAAGATCCCTAATGCTTTCGATGTGGTGA
CCAATGCCAAGCGGACCCTCAGGGAGCTGAAGATCCTCAAGCACTTTAAACACGACAACATCATCGCCAT
CAAGGACATCCTGAGGCCCACCGTGCCCTATGGCGAATTCAAATCTGTCTACGTGGTCCTGGACCTGATG
GAAAGCGACCTGCACCAGATCATCCACTCCTCACAGCCCCTCACACTGGAACACGTGCGCTACTTCCTGT
ACCAACTGCTGCGGGGCCTGAAGTACATGCACTCGGCTCAGGTCATCCACCGTGACCTGAAGCCCTCCAA
CCTATTGGTGAATGAGAACTGTGAGCTCAAGATTGGTGACTTTGGTATGGCTCGTGGCCTGTGCACCTCG
CCCGCTGAACATCAGTACTTCATGACTGAGTATGTGGCCACGCGCTGGTACCGTGCGCCCGAGCTCATGC
TCTCTTTGCATGAGTATACACAGGCTATTGACCTCTGGTCTGTGGGCTGCATCTTTGGTGAGATGCTGGC
CCGGCGCCAGCTCTTCCCAGGCAAAAACTATGTACACCAGCTACAGCTCATCATGATGGTGCTGGGTACC
CCATCACCAGCCGTGATTCAGGCTGTGGGGGCTGAGAGGGTGCGGGCCTATATCCAGAGCTTGCCACCAC
GCCAGCCTGTGCCCTGGGAGACAGTGTACCCAGGTGCCGACCGCCAGGCCCTATCACTGCTGGGTCGCAT
GCTGCGTTTTGAGCCCAGCGCTCGCATCTCAGCAGCTGCTGCCCTTCGCCACCCTTTCCTGGCCAAGTAC
CATGATCCTGATGATGAGCCTGACTGTGCCCCGCCCTTTGACTTTGCCTTTGACCGCGAAGCCCTCACTC
GGGAGCGCATTAAGGAGGCCATTGTGGCTGAAATTGAGGACTTCCATGCAAGGCGTGAGGGCATCCGCCA
ACAGATCCGCTTCCAGCCTTCTCTACAGCCTGTGGCTAGTGAGCCTGGCTGTCCAGATGTTGAAATGCCC
AGTCCCTGGGCTCCCAGTGGGGACTGTGCCATGGAGTCTCCACCACCAGCCCCGCCACCATGCCCCGGCC
CTGCACCTGACACCATTGATCTGACCCTGCAGCCACCTCCACCAGTCAGTGAGCCTGCCCCACCAAAGAA
AGATGGTGCCATCTCAGACAATACTAAGGCTGCCCTTAAAGCTGCCCTGCTCAAGTCTTTGAGGAGCCGG
CTCAGAGATGGCCCCAGCGCACCCCTGGAGGCTCCTGAGCCTCGGAAGCCGGTGACAGCCCAGGAGCGCC
AGCGGGAGCGGGAGGAGAAGCGGCGGAGGCGGCAAGAACGAGCCAAGGAGCGGGAGAAACGGCGGCAGGA
GCGGGAGCGAAAGGAACGGGGGGCTGGGGCCTCTGGGGGCCCCTCCACTGACCCCTTGGCTGGACTAGTG
CTCAGTGACAATGACAGAAGCCTGTTGGAACGCTGGACTCGAATGGCCCGGCCCGCAGCCCCAGCCCTCA
CCTCTGTGCCGGCCCCTGCCCCAGCGCCAACGCCAACCCCAACCCCAGTCCAACCTACCAGTCCTCCTCC
TGGCCCTGTAGCCCAGCCCACTGGCCCGCAACCACAATCTGCGGGCTCTACCTCTGGCCCTGTACCCCAG
CCTGCCTGCCCACCCCCTGGCCCTGCACCCCACCCCACTGGCCCTCCTGGGCCCATCCCTGTCCCCGCGC
CACCCCAGATTGCCACCTCCACCAGCCTCCTGGCTGCCCAGTCACTTGTGCCACCCCCTGGGCTGCCTGG
CTCCAGCACCCCAGGAGTTTTGCCTTACTTCCCACCTGGCCTGCCGCCCCCAGACGCCGGGGGAGCCCCT
CAGTCTTCCATGTCAGAGTCACCTGATGTCAACCTTGTGACCCAGCAGCTATCTAAGTCACAGGTGGAGG
ACCCCCTGCCCCCTGTGTTCTCAGGCACACCAAAGGGCAGTGGGGCTGGCTACGGTGTTGGCTTTGACCT
GGAGGAATTCTTAAACCAGTCTTTCGACATGGGCGTGGCTGATGGGCCACAGGATGGCCAGGCAGATTCA
GCCTCTCTCTCAGCCTCCCTGCTTGCTGACTGGCTCGAAGGCCATGGCATGAACCCTGCCGATATTGAGT
CCCTGCAGCGTGAGATCCAGATGGACTCCCCAATGCTGCTGGCTGACCTGCCTGACCTCCAGGACCCCTG
A

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_139034 unedited
TATACGACTCACTATAGGGCGGCCGCGAATTCGCACGAGGAAGACGCGGAGGTGGTGGCT
GCGGCCTTTGAACAAGTAAGTGAGCCACCCTCGGAGACCCCCGCGCTGGGGACGGGAGGC
CGGCGAGCCTCGGGACCTCTGAAAGCCTTGAGGAGGCGCGGGGACACCATGGCCGAGCCT
CTGAAGGAGGAAGACGGCGAGGACGGCTCTGCGGAGCCCCCCGGGCCCGTGAAGGCCGAA
CCCGCCCACACCGCTGCCTCTGTAGCGGCCAAGAACCTGGCCCTGCTTAAAGCCCGCTCC
TTCGATGTGACCTTTGACGTGGGCGACGAGTACGAGATCATCGAGACCATAGGCAACGGG
GCCTATGGAGTGGTGTCCTCCGCCCGCCGCCGCCTCACCGGCCAGCAGGTGGCCATCAAG
AAGATCCCTAATGCTTTCGATGTGGTGACCAATGCCAAGCGGACCCTCAGGGAGCTGAAG
ATCCTCAAGCACTTTAAACACGACAACATCATCGCCATCAAGGACATCCTGAGGCCCACC
GTGCCCTATGGCGAATTCAAATCTGTCTACGTGGTCCTGGACCTGATGGAAAGCGACCTG
CACCAGATCATCCACTCCTCACAGCCCCTCCACTGGAACACGTGCGCTACTTCCTGTACC
AACTGCTGGGCGGGCCTGGAGTACATGCACTCGGCTCAGGTCATCCACCGTGACCTGGAG
CCCTNCNNACCTATGGTGAATGAGAACTGTGAGCTCAAGATGGNTNGACTTGGTATGGGC
TCGTGGCCTGGTGCACCTNGCCCGCTGAACATCAGTACCNCATGACTGGAGTATTGTGGC
CCGCGCCTGGGACCGGGCGGCCCGAGCTCAGCCTCTCTTTGAATGAGATACCCAGCTATT
GACCCCGGGGTCGGGGGCGGGTA
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Restriction Sites: NotI-NotI

ACCN: NM_139034

Insert Size: 3270 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_139034.1, NP_620603.1

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

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 extracelluar 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]
Transcript Variant: This variant (4) is also known as BMK1 beta. It differs in the 5' UTR, as compared to variant 1. Variants 1, 3 and 4 encode the same isoform.