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Product datasheet for MC228619

Mapk7 (NM_001291035) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk7 (NM_001291035) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mapk7
Synonyms:	BMK-1; BMK1; ERK-5; ERK5; Erk5-T; PRKM7
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

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Fully Sequenced ORF:

>MC228619 representing NM_001291035
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGAGCGACCTACACCAGATCATTCACTCTTCACAGCCGCTCACCCTGGAACATGTGAGATACTTCC
TGTACCAGCTGCTTCGGGGCCTCAAATACATGCACTCTGCTCAGGTCATCCACCGTGATCTTAAACCCTC
TAACCTTCTGGTCAATGAGAACTGTGAGCTCAAGATCGGTGACTTTGGAATGGCCCGTGGCCTCTGTACT
TCCCCTGCCGAGCACCAGTACTTCATGACTGAGTATGTGGCTACTCGCTGGTACCGTGCCCCGGAGCTCA
TGCTTTCCCTGCACGAGTATACGCAGGCAATCGACCTCTGGTCTGTGGGCTGCATCTTTGGTGAGATGCT
GGCTCGGCGCCAGCTCTTCCCAGGCAAAAACTACGTGCACCAGTTACAGCTGATCATGATGGTGTTGGGA
ACTCCGTCACCAGCTGTGATTCAGGCTGTGGGGGCTGAAAGGGTGCGAGCCTATATCCAGAGCCTGCCAC
CAAGGCAACCTGTGCCTTGGGAGACAGTATACCCAGGTGCTGACCGCCAGGCCCTCTCCCTGCTGGGACG
CATGTTGCGATTTGAACCCAGTGCCCGAATCTCAGCTGCTGCTGCCCTTCGCCACCCCTTCCTGGCTAAG
TACCATGACCCTGATGATGAGCCTGATTGCGCCCCACCTTTTGACTTTGCTTTTGACCGTGAAGCCCTTA
CCAGGGAGCGCATTAAGGAGGCCATTGTGGCTGAGATTGAGGACTTCCATGCACGACGGGAGGGCATCCG
CCAACAAATCCGCTTCCAGCCTTCTCTGCAGCCTGTGGCTAGTGAGCCTGTGTGTCCAGATGTTGAGATG
CCCAGTCCCTGGGCTCCAAGTGGAGACTGTGCCATGGAGTCGCCTCCTCCAGCACTGCCACCATGCTCTG
ATCCTGCACCTGACACCGTTGATCTGACTCTGCAGCCTGCCCCGCCGGCCAGTGAGCTTGCTCCACCAAA
AAGAGAGGGTGCCATCTCCGACAATACCAAAGCAGCCCTCAAAGCTGCCCTGCTCAAGTCCCTAAGGAGC
AGGCTCAGAGATGGGCCCAGTGCACCCTTGGAGGCGCCTGAGCCTCGAAAGCCCGTGACAGCTCAGGAAC
GCCAGCGAGAACGAGAAGAGAAGCGCAGGAGGCGACAAGAGAGAGCCAAGGAGCGGGAGAAGCGACGACA
AGAGAGAGAACGCAAGGAGAGGGGGGCTGGTACCTTGGGGGGCCCCTCTACTGACCCTCTGGCTGGACTG
GTGCTCAGTGACAATGACCGAAGCCTGCTAGAGCGGTGGACTCGCATGGCTAGGCCTCCTGCCCCTGCCC
CTGCCCCAGCGCCAGCACCAGCGCCAGCACCGTCCTCTGCCCAGCCCACTAGTACTCCTACTGGCCCCGT
ATCTCAGTCTACTGGTCCTCTACAGCCTGCAGGCTCTATTCCGGGTCCTGCCTCCCAGCCTGTTTGCCCA
CCCCCTGGCCCTGTTCCCCAGCCTGCTGGCCCTATCCCTGCTCCGCTCCAGACTGCCCCTTCCACTAGCC
TTTTGGCCTCCCAGTCACTTGTGCCACCTAGTGGGTTGCCTGGTTCTGGTGCCCCAGAAGTTCTGCCTTA
CTTCCCATCTGGCCCACCACCTCCAGATCCTGGGCTCACCCCTCAGCCTTCTACATCAGAGTCACCTGAT
GTCAACCTGGTGACTCAGCAGCTGTCCAAGTCTCAGGTGGAGGACCCCCTGCCTCCTGTGTTCTCTGGCA
CTCCAAAGGGCAGTGGGGCTGGCTACGGAGTTGGCTTTGATCTGGAGGAATTCTTAAATCAATCTTTTGA
TATGGGTGTGGCTGATGGGCCACAGGATGGCCAGGCAGACTCAGCCTCACTCTCAGCCTCTCTCCTTGCT
GACTGGCTTGAGGGCCATGGCATGAACCCTGCTGACATTGAGTCTCTGCAGCGTGAGATCCAGATGGACT
CCCCAATGCTGCTGTCTGACCTGCCTGACCTCCAAGAGCCCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001291035

Insert Size: 2004 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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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_001291035.1, NP_001277964.1
RefSeq Size:	3265 bp
RefSeq ORF:	2004 bp
Locus ID:	23939
UniProt ID:	Q9WVS8
Cytogenetics:	11 B2
Gene Summary:	Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. Phosphorylates SGK1 at Ser-78 and this is required for growth factor-induced cell cycle progression (By similarity). Involved in the regulation of p53/TP53 by disrupting the PML-MDM2 interaction (By similarity). [UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (4) differs in its 5' UTR uses a downstream start codon, compared to variant 1. The encoded isoform (c) has a shorter N-terminus, compared to isoform a. Both variants 4 and 5 encode the same isoform.