

Product datasheet for **MC228722**

Mapk7 (NM_001291037) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk7 (NM_001291037) 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: >MC228722 representing NM_001291037
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCCTTTCTGCTCCCCAGGCCAGCAGGTGGCCATCAAGAAGATACCTAATGCTTTTGTGTGGTGA
 CCAATGCCAAACGACCCTCAGGGAGCTGAAGATCCTCAAACACTTCAAACACGACAATATCATCGCCAT
 CAAGGACATCCTGAAGCCTACTGTGCCCTATGGAGAATTCAGATCTGTCTATGTGGTACTGGACCTCATG
 GAGAGCGACCTACACCAGATCATTCACTCTTACAGCCGCTCACCTGGAACATGTGAGATACTTCTGT
 ACCAGCTGCTTCGGGGCCTCAAATACATGCACTCTGCTCAGGTATCCACCGTATCTTAAACCTCTAA
 CCTTCTGGTCAATGAGAAGTGTGAGCTCAAGATCGGTGACTTTGGAATGGCCCGTGGCCTCTGACTTCC
 CCTGCCGAGCACCAGTACTTCATGACTGAGTATGTGGCTACTCGTGGTACCGTGCCCGGAGCTCATGC
 TTTCCCTGCACGAGTATACGCAGGCAATCGACCTCTGGTCTGTGGGCTGCATCTTTGGTGTGATGCTGGC
 TCGGGCCAGCTCTCCAGGCAAAAACACTACGTGCACCAGTTACAGCTGATCATGATGGTGTGGGAACT
 CCGTACCCAGCTGTGATTCAGGCTGTGGGGCTGAAAGGGTGCAGCCTATATCCAGAGCCTGCCACCAA
 GGCAACCTGTGCCTTGGGAGACAGTATACCCAGGTGCTGACCGCCAGGCCCTCTCCCTGTGGGACGCAT
 GTTGCGATTTGAACCCAGTGCCCGAATCTCAGCTGCTGCTGCCCTTCGCCACCCCTTCTGGCTAAGTAC
 CATGACCTGTGATGAGCCTGATTGCGCCCACTTTTGACTTTGCTTTTGACCGTGAAGCCCTTACCA
 GGGAGCGCATTAAAGGAGGCCATTGTGGCTGAGATTGAGGACTTCCATGCACGACGGGAGGGCATCCGCCA
 ACAATCCGCTTCCAGCCTTCTCTGCAGCCTGTGGCTAGTGAGCCTGTGTGTCCAGATGTTGAGATGCCC
 AGTCCCTGGGCTCCAAGTGGAGACTGTGCCATGGAGTGCCTCCTCCAGCACTGCCACCATGCTCTGATC
 CTGCACCTGACACCGTTGATCTGACTCTGCAGCCTGCCCGCCGCAATGGGCCAGTGCACCCTTGGA
 GCGCCTGAGCCTCGAAAGCCCGTGACAGCTCAGGAACGCCAGCGAGAACGAGAAGAGAAGCGCAGGAGG
 CGACAAGAGAGAGCCAAGGAGCGGGAGAAGCGACGACAAGAGAGAGAACGCAAGGAGAGGGGGGCTGGTA
 CCTTGGGGGGCCCTCTACTGACCTCTGGCTGGACTGGTGTCTCAGTGACAATGACCGAAGCCTGTAGA
 GCGGTGGACTCGCATGGCTAGGCCTCCTGCCCTGCCCTGCCAGCGCCAGCACCAGCGCCAGCACCG
 TCCTCTGCCAGCCACTAGTACTCCTACTGGCCCGTATCTCAGTCTACTGGTCTCTACAGCCTGCAG
 GCTCTATTCCGGTCTGCTCCAGCCTGTTTGGCCACCCCTGGCCCTGTTCCCGCAGCCTGCTGGCCC
 TATCCCTGCTCCGCTCCAGACTGCCCTTCCACTAGCCTTTTGGCTCCAGTCACTTGTGCCACCTAGT
 GGGTTGCCTGGTCTGGTGCCCCAGAAGTCTGCCTTACTTCCCATCTGGCCACCACCTCCAGATCCTG
 GGCTACCCCTCAGCCTTCTACATCAGAGTACCTGATGTCAACCTGGTACTCAGCAGCTGTCCAAGTC
 TCAGGTGGAGGACCCCTGCCTCCTGTGTTCTCTGGCACTCAAAGGGCAGTGGGGCTGGTACGGAGTT
 GGCTTTGATCTGGAGGAATCTTAAATCAATCTTTTGTATGGGTGTGGCTGATGGGCCACAGGATGGCC
 AGGCAGACTCAGCCTCACTCTCAGCCTCTCCTTGTGACTGGCTTGGGGCCATGGCATGAACCTGCT
 TGACATTGAGTCTCTGCAGCGTGAGATCCAGATGGACTCCCAATGTGTGTGCTGACCTGCCTGACCTC
 CAAGAGCCCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001291037
Insert Size: 2112 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:	<ol style="list-style-type: none">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:	<u>NM_001291037.1, NP_001277966.1</u>
RefSeq Size:	3264 bp
RefSeq ORF:	2112 bp
Locus ID:	23939
UniProt ID:	<u>Q9WVS8</u>
Cytogenetics:	11 B2
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (6) differs in its 5' UTR, uses an alternate start codon, and uses an alternate splice site in the central coding region, compared to variant 1. The encoded isoform (d) is shorter and has a distinct N-terminus, compared to isoform a.</p>