

Product datasheet for **SC323360**

MAPK6 (NM_002748) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MAPK6 (NM_002748) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAPK6
Synonyms:	ERK3; HsT17250; p97MAPK; PRKM6
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC323360 sequence for NM_002748 edited (data generated by NextGen Sequencing)

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ATGGCAGAGAAATTTGAAAGTCTCATGAACATTCATGGTTTTGATCTGGGTTCTAGGTAT
ATGGACTTAAAACCATTGGGTTGTGGAGGCAATGGCTTGGTTTTTCTGCTGTAGACAAT
GACTGTGACAAAAGAGTAGCCATCATGAAAATTGCCTTACTGATCCCCAGAGTGTCAAA
CATGCTCTACGTGAAATCAAAATTATTAGAAGACTTGACCATGATAACATTGTGAAAGTG
TTTGAGATTCTTGGTCCCAGTGGGAAGCCAATTAACAGACGATGTGGGCTCTCTTACGGAA
CTGAACAGTGTTTACATTGTTCAGGAGTACATGGAGACAGACTTGGCTAATGTGCTGGAG
CAGGGCCCTTTACTGGAAGAGCATGCCAGGCTTTTCATGTATCAGCTGCTACGGGGGCTC
AAGTATATTTCACTCTGCAAATGTACTGCACAGAGATCTCAAACCAGCTAATCTTTTCATT
AATACGGAAGACTTGGTCTGAAGATAGGTGACTTTGGTCTTGCACGGATCATGGATCCT
CATTATTTCCATAAGGGTCATCTTTCTGAAGGATTGGTTACTAAATGGTACAGATCTCCA
CGTCTTTTACTTTCTCCTAATAATTATACTAAAGCCATTGACATGTGGGCTGCAGGCTGC
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ATGCAGCTGATTTTAGAATCTATTCCTGTTGTACATGAGGAAGATCGTCAGGAGCTTCTC
AGCGTAATTCAGTTTACATTAGAAATGACATGACTGAGCCACACAAACCTTTAACTCAG
CTGCTTCCAGGAATTAGTCGAGAAGCAGTGGATTTCTGGAACAAATTTTGACATTTAGC
CCCATGGATCGGTTAACAGCAGAAGAAGCACTCTCCCATCCTTACATGAGCATATATTCT
TTTCCAATGGATGAGCCAATTTCAAGCCATCCTTTTCATATTGAAGATGAAGTTGATGAT
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CAGTTTTTACAGAGCATGATTGGCCTGTACATAACAACCTTTGATATTGATGAAGTTCAGCT
GATCCAAGAGCTCTGTCCGATGTCAGTATGAAGAAGAAGTACAAGTTGATCCCCGAAAA
TATTTGGATGGAGATCGGGAAGTATCTGGAGGATCCTGCTTTTGGATACCAATTACTCT
ACTGAGCCTTGTGGCAATACTCAGATCATGAAAACAAATATTGTGATCTGGAGTGT
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GTTAAAGCCAGATAGCGCTAGAGGAAGCATCACAGCAACTGGCTGGAAAAGAAAGGAA
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CATGAGCCTACTGATGTTGTTGATAAAATTAATGACTTGAATAGCTCAGTGTCCCAACTA
GAATTGAAAAGTTTATCAAAAGTCAGTAAGCCAAGAAAAACAGGAAAAAGGAATGGCA
AATCTGGCTCAATTAGAAGCCTTGACCAAGTCTTCTTGGGACAGCCAGTTTGTGAGTGGT
GGGGAGGACTGTTTTTCATAAATCAGTTTTGTGAGGTAAAGGAAGGATGAACAAGTTGAG
AAGGAAAAACCTTACACTAGTTACTTGGACAAGTTCTTTAGCAGGAAAGAAGATACTGAA
ATGCTAGAAAACAGTGGGAGTTCCCTTTAACAAGCAGCTCGAGTCCATAGGCATCCCA
CAGTTTACAGTCCAGTTGGGTCACCACTTAAGTCAATACAGGCCACATTAACACCTTCT
GCTATGAAATCTCCCTCAAATTCCTCATCAAACATACAGCAGCATTCTGAAACATCTG
AACTAA
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Clone variation with respect to NM_002748.3
146 a=>t;868 c=>g

5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_002748 unedited AAGGAAGAGGGCGAGAAGACGACGTGGGGGAGGGAGGGCAACAGCAGGCAGGCAGCGAAAGTAGACAACG ACAGAAACAAAGAGGGGAGGAGATGGACGAGGGCAGCGGGAAGCGAGAGCCCGGAAGCAGAGCACC CAAAGAACAGAGTAAAACAGAAGAGCCAGAAGCTTAGAAACACACGAAGAGGACGGGGAAGACCGAAAGGA CAAAGGAAGAAGGGAGGGAGCCCCGACAGGGAAGGGGGGGGGCGGGGGCCACCAGGACACCAAAACAAAG AAAACCCACGGCAAACCAACAGCCGGCAGGGGCCCGCGCAAAAAAAAAAAAAAAAAACCACCAAGGGAAAA AAAGAAACCAAAACGAAAAAGCGGCCAACAGCCCTCCAGAAAGGAGGCCCTCAGACCCGTTCCAC ACTGGATGGTTTTGCACTGTTGAGGAAAAAGGATATTAGAAGCCTGGTTGGTGTGCATATTTTATTTC CATTTTTTGTAAATGTTAAATCGTTTTAGCACGGTAATCTGAGTTGCACAGTATGTCATTTTATTCCG TTTTGAGTTTTCTTTGTTTTCGTTAAATGTCTGCAGAGTTGCTGCCCTTTCTTGAAGTATGAGTACTGC AATCTTTTTAATTCTCAATATGAATAGAGCTTTTTGAGCTTTAAATCTAAGGGAACTCGACAGGCCTGT TTGGCATATGCAATGAACATCAAGAAACCATCTTGCTGTGGAAGCATAATTATTTTTCTTCTCTTTTGA AGATCTTTCTTTGATGCCAGTTTTCTTCTTGTACACCAAGTTCATTTGAAAGAAAAGCATAAGTAAGTT TCAAATGCAGAGAATTTGAAGTCTCATGACATCATGTTTGATCTGGTTCTAGTATATGACTAAACATTGG TTGTGGAGGCATTGCCT
Kinase Domain Sequence:	>SC323360 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation AGAATTAACATTGGGTTGTGGAGGCATGGCTTGGTTTTTCTGCTGTAGACAATGACTGTGACAAAAGAG TAGCCATCATGAAAATTGTCCTTACTGATCCCCAGAGTGTCAAACATGCTCTACGTGAAATCAAATAT TAGAAGACTTGACCATGATAACATTGTGAAAGTGTGAGATTCTGGTCCCAGTGAAGCCAATTAACA GACGATGTGGCTCTCTACGGAAGTGAACAGTGTTCATTGTT
Restriction Sites:	Please inquire
ACCN:	NM_002748
Insert Size:	4000 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:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell, 2008 May p536-548.
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:	NM_002748.2 , NP_002739.1
RefSeq Size:	4193 bp

RefSeq ORF:	2166 bp
Locus ID:	5597
UniProt ID:	Q16659
Cytogenetics:	15q21.2
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase
Gene Summary:	The protein encoded by this gene is a member of the Ser/Thr protein kinase family, and is most closely related to mitogen-activated protein kinases (MAP kinases). MAP kinases also known as extracellular signal-regulated kinases (ERKs), are activated through protein phosphorylation cascades and act as integration points for multiple biochemical signals. This kinase is localized in the nucleus, and has been reported to be activated in fibroblasts upon treatment with serum or phorbol esters. [provided by RefSeq, Jul 2008]