

## Product datasheet for **SC118463**

### MAPK4 (NM\_002747) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MAPK4 (NM_002747) Human Untagged Clone
Tag:	Tag Free
Symbol:	MAPK4
Synonyms:	ERK-4; ERK4; p63-MAPK; p63MAPK; PRKM4
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_002747 edited  
 ATGGCTGAGAAGGGTGACTGCATCGCCAGTGTCTATGGGTATGACCTCGGTGGGCGCTTT  
 GTTGACTTCCAACCCCTGGGCTTCGGTGTCAATGGTTTGGTGCTGTCGGCCGTGGACAGC  
 CGGGCTGCCGGAAGGTCGCTGTGAAGAAGATTGCCCTGAGCGATGCCCGCAGCATGAAG  
 CACGCGCTCCGAGAGATCAAGATCATTCCGGCGCCTGGACCACGACAACATCGTCAAAGTG  
 TACGAGGTGCTCGGTCCCAAGGGCACTGACCTGCAGGGTGAGCTGTTCAAGTTCAGCGTG  
 GCGTACATCGTCCAGAGTACATGGAGACCGACCTGGCAGCGCTGCTGGAGCAGGGCAGC  
 CTGGCAGAAGAGCATGCCAAGCTGTTTACGTACCAGCTGCTCCGCGGGCTCAAGTACATC  
 CACTCCGCCAACGTGCTGCACAGGGACCTGAAGCCCGCCAACATCTTCATCAGCACAGAG  
 GACCTCGTCTCAAGATTGGGGATTTCCGGTTGGCAAGGATCGTTGATCAGCATTACTCC  
 CACAAGGGTTATCTGTCAGAAGGGTTGGTAACAAAGTGGTACCGTTCCCCACGACTGCTC  
 CTTTCCCCAATAACTACACAAAGCCATCGACATGTGGGCGCCGGCTGCATCTGGCT  
 GAGATGCTTACGGGGAGAATGCTCTTTGCTGGGCCCCATGAGCTGGAGCAGATGCAACTC  
 ATCCTGGAGACCATCCCTGTAATCCGGGAGGAAGACAAGGACGAGCTGCTCAGGGTGATG  
 CCTTCTTTGTCAGCAGCACCTGGGAGGTGAAGAGGCCTCTGCGCAAGCTGCTCCCTGAA  
 GTGAACAGTGAAGCCATCGACTTTCTGGAGAAGATCCTGACCTTTAACCCATGGATCGC  
 CTAACAGCTGAGATGGGGCTGCAACACCCCTACATGAGCCATACTCGTGCCCTGAGGAC  
 GAGCCACCTCACAACACCCCTTCCGCATTGAGGATGAGATCGACGACATCGTGCTGATG  
 GCCGCTAACAGAGCCAGCTGTCCAAGTGGGACACGTGCAGTTCCAGGTACCCCTGTGAGC  
 CTGTGCTCGGACCTGGAGTGGCGGCCTGACCGGTGCCAGGACGCCAGCGAGGTACAGCGC  
 GACCCGCGCGGGTTCCGGCGCCACTGGCTGAGGACGTGCAGGTGGACCCGCGCAAGGAC  
 TCGCACAGCAGCTCCGAGCGCTTCTAGAGCAGTGCAGTGCAGTGGACCCGCGCAAGGAC  
 GAGGCCGACTACGGGCGCTCCTGCGACTACAAGTGGGGTCCCGCTCTACCTGGACAAG  
 CTGCTGTGGCGCACAACAAGCCGACCACTACTCGGAGCCCAAGCTCATCTGGACCTG  
 TCGCACTGGAAGCAGGGCGCCGGCGCGCCCCACGGCCACGGGGCTGGCGGACACGGGG  
 GCGCGCGAGGACGAGCCGGCCAGCCTCTTCTGGAGATCGCGCAGTGGGTCAAGAGCAG  
 CAGGGCGGCCAGAGCACGCCAGCCCGCCGCGCAGCCCCGAGCGCGCTTGTCTGCC  
 TCGCCCCCGCCGCGCCCGCCCGGTGGACGGCGGCCAGCCCCAGTTCGACCTGGAC  
 GTGTTTCTCTCCGCGCCTGAAGCTCTGCACCAAGCCCGAGGACCTGCCGACAATAA

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_002747 unedited  
 CACTATTTTGTAAATACGACTCACTATAGGGCGCCGCGNAATTCGCACGAGGCACANAAA  
 GAGGCTGTGACACAGCTGAGCTTTGGAGCATCTTAAGGAGCTCAGCTCAGCAAACAATC  
 TTGCATTTTCAGCCAGAAAGAGCCTTTGTAACAAAGTATTCAAAGGGGAGAGTTTCTGCA  
 TCTTTTACTTTGCAGTCCACTATGGTAGAAAATTTGACATTCCATAGATAATGATACTGG  
 GTTTTCTTTCCAAGATGCCAGCTTTAAAAGAAATATGAGCCATTCTAAGCTTTAAGAAGG  
 GTTCAGGAAACACAGGAATTAGTAGACAGCCCTCCAATGCAGGTTAAGACGACAGCCTG  
 CGCCCCAACTAGCACAGCTCAGCGAGCATGACCATATGCCATTCTCGTCTCCAGAGAGC  
 TGGTGGCAGTGACCTCACTAGGAGAAAACATCCCTCAGCCGTGGGACTTGACAGAATG  
 AGGTGCGCGAGGGAGGCCGCTAGCCGAGACGTGGCCTTTCTGACTGCCCTGTGTTACC  
 TGGGCAGCTCCAGATCACTGAGCCACAATGGCTGAGAAGGGTACTGCATCGCCAGTGT  
 CTATGGGTATGACCTCGGTGGGCGCTTTGTTGACTTCCAACCCCTGGGCTTCGGTGTCAA  
 TGGTTTGGTGCTGTCGGCCGTGGACAGCCGGCCTGCCGGAAGGTCGCTGTGAAGAAGAT  
 TGCCCTGAGCGATGCCCGCAGCATGAAGCACGCGCTCCGAGAGATCAAGATCATTCCGGC  
 CCTGGNACCACGACACATCGTCAAAGTGTACGAAGTGTNCGTCCCAAGGCACTGACCTG  
 CAGGNTGAGCTGTTTCAAGTTCAGCGTGGCGTACATCGTCCAGAAGTCATGGAGACCGACCT  
 GCACGCTGCTGNAGCAGGCACGCTGCAGAAGACATGCCAGCT

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_002747 unedited NTTACTGTGTACCGCGCCGCATCTACGATCGGTTTTTTTTTTTTTTTTTTAAACAAAAAT CAAAACCCAAACACTTCTTATTTACATATTTCCATTTAAAAGTTGGACAGGGTGATTAA TTCTGTTTTTAAATAAATTTCTAATGTGTTGCAGGTTCAACGTACAAATTATAGTTT GCTGATTAGATTTAAGGTGCTGTGATGTGAGGGTGAACGCATCCCAAGACCAACTGGTGG AATCCTCTACCTGGAACTGGCTGGACTTCTGTGGGTATCTTTGGGAGTGTGGGGGAA GAGAAGGAGCTGAACACCAGTGGCAGAAATGGTATAATGTTCTGGGGACCAGATAGGGG CTGTCAGTGTCCCCACCCACGCTTCTGCAGAGGGCCTGTGTCTACACACCATTACCCCA TGCTCTGTGGGTGAGCACACAGGTTTGCATGCACCAAACCTCACCTTAGCCTACACTATGA GGGGCATTGCTGCTTTGAGTCCCTTCTTTGTCATGAGGTCTACATGCTGGTGCCTGACC CCTAAGAGCCCTTGCTGTTGACACCTCTCTTTTCATATCTTCTACCTTTCTGGATTCT TGCCCCAAGTCACGACGTGCTCTCCAACCATCTCTGTAGGGTCTGCTGTTTGTCAAGGC TAAATGGATGATCAAACCTCTCGACAGTATTGATGAAGGATGTTCCGGTCCCATGTGACACC TTCTCTACTACACATTTGCTCTATGGGCAGACCTCACTGCTGCCTTCAATGAACAGTTC ATGTAAAGAACTTAAGTCCCAGTAGGTCTGAAGAGCGCTTGTGTTANGTCGCGGGCCCC CTTGTGTATAGGGCCATCCTGCACCGAGTCTTGAGGTTTTTGCCTGTTGCCTCACCT TCTGGGTAAGACGCG
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_002747
<b>Insert Size:</b>	4220 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_002747.2</a> , <a href="#">NP_002738.1</a>
<b>RefSeq Size:</b>	4173 bp
<b>RefSeq ORF:</b>	1674 bp
<b>Locus ID:</b>	5596
<b>UniProt ID:</b>	<a href="#">P31152</a>
<b>Cytogenetics:</b>	18q21.1-q21.2
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase

**Gene Summary:**

Mitogen-activated protein kinase 4 is a member of the mitogen-activated protein kinase family. Tyrosine kinase growth factor receptors activate mitogen-activated protein kinases which then translocate into the nucleus and phosphorylate nuclear targets. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).