

Product datasheet for SC116450

ASK1 (MAP3K5) (NM_005923) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: ASK1 (MAP3K5) (NM_005923) Human Untagged Clone
Tag: Tag Free
Symbol: ASK1
Synonyms: ASK1; MAPKKK5; MEKK5
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_005923 edited
 ATGAGCACGGAGGCGGACGAGGGCATCACTTTCTCTGTGCCACCCTTCGCCCCCTCGGGC
 TTCTGCACCATCCCCGAGGGCGGCATCTGCAGGAGGGGAGGAGCGCGCGGTGGCCGAG
 GCGGAGGAGCACCAGCTGCCACCGCCGCGCGGGCAGCTTCTGGAACGTGGAGAGCGCC
 GCTGCCCTGGCATCGGTTGTCCGGCGGCCACCTCCTCGAGCAGTGCCACCCGAGCCGG
 GGCAGCTCTGTTGGCGGGGCGAGCCGACGGACCACGGTGGCATATGTGATCAACGAAGCG
 AGCCAAGGGCAACTGGTGGTGGCCGAGAGCGAGGCCCTGCAGAGCTTGCGGGAGGCGTGC
 GAGACAGTGGGCGCCACCCTGAAACCCTGCATTTTGGGAACTCGACTTTGGAGAAACC
 ACCGTGCTGGACCGCTTTACAATGCAGATATTGCGGTGGTGGAGATGAGCGATGCCTTC
 CGGCAGCCGTCCTTGTGTTTACCACCTTGGGGTGAGAGAAAAGTTTTCAGCATGGCCAACAAC
 ATCATCTCTACTGTGATACTAAGTCCGACTCTCTGCAGTCACTGAAGGAAATAATTTGC
 CAGAAGAATACTATGTGCACTGGGAACTACACCTTTGTTCTTACATGATAACTCCACAT
 AACAAAGTCTACTGCTGTGACAGCAGCTTCATGAAGGGTTGACAGAGCTCATGCAACCG
 AACTTCGAGCTGCTTCTTGGACCATCTGCTTACCTCTTGTGGATCGTTTTATTCAACTT
 TTGAAGGTGGCACAAGCAAGTTCTAGCCAGTACTTCCGGGAATCTATACTCAATGACATC
 AGGAAAGCTCGTAATTTATACACTGGTAAAGAATTGGCAGCTGAGTTGGCAAGAATTTCG
 CAGCGAGTAGATAAATCGAAGTCTTGACAGCAGATATTGCATAAATCTGTTACTTTCC
 TACAGAGATATCCAGGACTATGATTCTATTGTGAAGCTGGTAGAGACTTTAGAAAACTG
 CCAACCTTTGATTTGGCCTCCCATCACCATGTGAAGTTTCATTATGCATTTGCATGAAT
 AGGAAAAATCTCCCTGGTGACAGAGCAAAAGCTCTTGATATTATGATTCCCATGGTGCAA
 AGCGAAGGACAAGTTGCTTCAGATATGTATTGCCTAGTTGGTTCGAATCTACAAAGATATG
 TTTTTGGACTCTAATTTACGGACACTGAAAGCAGAGACCATGGAGCTTCTTGGTTCAA
 AAGGCATTTGAATCTGAGCCAACACTACAGTCAGGAATTAATTATGCGGTCTCTCCTG
 GCAGCTGGACACCAGTTTGAATCTTCTTTGAGCTCCGAAAAGTTGGGGTGAAGCTAAGT
 AGTCTTCTTGGTAAAAAGGAACTTGGAAAACTCCAGAGCTACTGGGAAGTTGGATTT
 TTTCTGGGGCCAGCGTCTAGCCAATGACCACATGAGAGTCATTCAAGCATCTGAAAAG
 CTTTTTAACTGAAGACACCAGCATGGTACCTCAAGTCTATTGTAGAGACAATTTTGATA



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TATAAGCATT TTTGTGAACTGACCACAGAACAGCCTGTGGCCAAGCAAGAACTTGTGGAC
 TTTTGGATGGATTTCTGGTTCGAGGCCACAAAGACAGATGTTACTGTGGTTAGGTTTCCA
 GTATTAATATTAGAACCAACCAAAATCTATCAACCTTCTTATTTGTCTATCAACAATGAA
 GTTGAGGAAAAGACAATCTCTATTTGGCACGTGCTTCCTGATGACAAGAAAGGTATACAT
 GAGTGGAAATTTAGTGCCTCTTCTGTGAGGGGAGTGAGTATTTCTAAATTTGAAGAAAGA
 TGCTGCTTTCTTATGTGCTTCAACAATCTGATGATTTCCAAATCTATTTCTGTACAGAA
 CTTCAATGTAAAAAGTTTTTTGAGATGGTGAACACCATTACCGAAGAGAAGGGGAGAAGC
 ACAGAGGAAGGAGACTGTGAAAGTGACTTGTGGAGTATGACTATGAATATGATGAAAAAT
 GGTGACAGAGTCGTTTTAGGAAAAGGCACCTTATGGGATAGTCTACGCAGGTCGGGACTTG
 AGCAACCAAGTCAGAATTGCTATTAAGGAAATCCCAGAGAGAGACAGCAGATACTCTCAG
 CCCCTGCATGAAGAAATAGCATTGCATAAACACCTGAAGCACAAAAATATTGTCCAGTAT
 CTGGGCTCTTTCAGTGAGAATGGTTTCATTAATAATCTTCATGGAGCAGGTCCTGGAGGA
 AGTCTTCTGCTCTCCTCGTTCCAAATGGGTCCATTAAGACAATGAGCAAACAATT
 GGCTTTTATACAAAGCAAATACTGGAAGGATTAATAATCTCCATGACAATCAGATAGTT
 CACCGGGACATAAAGGGTACAATGTGTTGATTAATACCTACAGTGGTGTCTCAAGATC
 TCTGACTTCGGAACATCAAGAGGCTTGTGGCATAAACCCCTGTACTGAACTTTTACT
 GGTACCCTCCAGTATATGGCACCAGAAATAATAGATAAAGGACCAAGAGGCTACGGAAAA
 GCAGCAGACATCTGGTCTCTGGGCTGTACAATCATTGAAATGGCCACAGGAAAACCCCA
 TTTTATGAACTGGGAGAACCACAAGCAGCTATGTTCAAGTGGAATGTTTAAAGTCCAC
 CCTGAGATCCCAGAGTCCATGTCTGCAGAGGCCAAGGCATTACTACTGAAATGTTTTGAA
 CCAGATCTGACAAGAGAGCCTGTGCTAACGACTTGCTTGTGATGAGTTTTTAAAGTT
 TCAAGCAAAAAGAAAAGACACAACCTAAGCTTTCAGCTCTTTCAGCTGGATCAAATGAA
 TATCTCAGGAGTATATCCTTCCGGTACCTGTGCTGGTGGAGGACACCAGCAGCAGCAGT
 GAGTACGGCTCAGTTTACCCGACACGGAGTTGAAAGTGACCCCTTCTCTTTCAAAAACA
 AGAGCCAAGTCCCTGCGGAGAAAGAGATGTCAAGGGAATTCGAGACTCTTTTTGGGCATT
 CCAGATGAGAATTTTGAAGATCACAGTGTCTCCTTCCCTGAAGAAAAAGATTCTGGA
 TTCTTCATGCTGAGGAAGGACAGTGAGAGGCGAGCTACCCTTACAGGATCCTGACGGAA
 GACCAAGACAAAATTGTGAGAACTTAATGGAATCTTTAGCTCAGGGGGTGAAGAACC
 AAATAAAATGGGAACACATCACACCCTCATTGCAAGCCTCAGAGAATTTGTGAGATCC
 ACTGACCGAAAAATCATAGCCACCACACTGTCAAAGCTGAACTGGAGCTGGACTTCGAC
 AGCCATGGCATTAGCCAAGTCCAGTGGTACTCTTTGGTTTTCAAGATGCTGTCAATAAA
 GTTCTTCGGAATCATAACATCAAGCCGCACTGGATGTTTGCCTTAGACAGTATCATTCCG
 AAGCGGTACAGACAGCCATTACCATCCTGGTTCCAGAATAAGGCCACATTTACGCCTT
 GCATCTGAGAGTGATACTGCTGATCAAGAAGACTTGGATGTAGAAGATGACCATGAGGAA
 CAGCCTTCAAATCAAACCTGTCCGAAGACCTCAGGCTGTCAATTGAAGATGCTGTGGCTACC
 TCAGGCGTGAGCAGCTCAGTCTACTGTGTCTCATGATTTCCAGAGTGTCCACCGGTCA
 CTGAATGTACAGCTTGAAGGATGAAAAAGAAACCAATAGATTACTGGAAGAATTTGGTT
 CGGAAAGAGAAAGAAATTACAAGCACTCCTTCATCGAGCTATTGAAGAAAAAGACCAAGAA
 ATTAACACCTGAAGCTTAAGTCCCAACCCATAGAAATTCCTGAATTGCCTGTATTTTCT
 CTAATTTCTTCTGGCACAAATACTGAAGATTCTGAACCTTACCGACTGGCTGAGAGTGAAT
 GGAGCTGATGAAGACACTATAAGCCGTTTTTTGGCTGAAGATTATACACTATTGGATGTT
 CTCTACTATGTTACAGTGTACTTAAAATGCTTGAAGTAAAGGGGAGGGATGCTGTGC
 ACACTGTGGAAGGCTATCATTGACTTTTCAAACAACAGACTTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005923 unedited
 GGCGGTAGGCGTGTACGGTGGGAGTCTATATAAGCAGAGCTCGTGTAGTGAACCGTCA
 GAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGGCACAGGCGCGGGT
 GCGAGGGCGGGCTGCACCCGAGCGCGGCCCTTGTGCTGCACCGCGGCGAGTTTTG
 CGAGCCGACTTGTGAGCCGCAAGAAAAGGAAGCTCCGTCCCTTCCCGCTCACCCGGCT
 TCCCCACCCCTTGTACTCTAAACTCTGCAGAGGGCGAGCGGCGGCCACGGAGGCGCG
 AGGAGGAGCGAGCCGCGCGGGCAGCGGCGTCCCTCGGGGAGAGGGCGCGGAGAGG
 AGGCGGCGCGCGGCGGAGGGCGCGCGCGATGGCAGCTGCTTAGCCGCGCGGCG
 CGGAGCAG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005923 unedited
 ACCTTGGTATCNCGACCCGTCGCTTCNGNANNCAANNNNAGGCCCTTTTTTTTTTAA
 CATGAGTATTTTATACTGGATTTAAAGTGCAGCGCCCTTCTCCTCTCCCTTCGATTTTCC
 CACCCCAAGAAGACAGCTCTGTATTAATTTTTACAATTTCCATCGAATATTATATTGAG
 CACCATCAAGTCTGTTTGTTCGAAAGACAAAGATTTCTTCCACTTTGNGCACAGCAN
 CCCTTCTTAGTCTCAAGCATTTTAAGTCATCACGTGTAACATAGTACAGAACATCCAA
 TAGTGTATAATCTTACCCAAAAACCGGCTTATAGCGTCTTCATCACCTCCATTACCCT
 CAGCCAGCCGGTAAGTCCACAATCTCCCTTCTCCCCACNACTTCACATGAAACAC
 ACGCAATTCAGGAATCTCTATCGCCGGCCCTTAACCTCCACGCGCTCAATTCGCCGCC
 TCCCCCTCANTANCTTCCAACGGATTGCTCTGCCCTTTTCTCTCCCCAACCAATTC
 TTCCCACCATCTACCTCCCCCTACTCCCCCTCCACCCCTTCCCTTCTCTCCCCC
 CCCCCCTCTCGTACTCTGCACCACCCTCCCATCTCCCTCCTCCTCCCCCACCCT
 CCCCTCTCTCTCTACCCCTCCTTCCCTCCTCCCCCCCCCTCCCTTCCGCTCCCC
 CCTTACNNCCCCCNTTCCCCCTCCCCCCCCCTGTACCCCTACCCCCCCCCGCCCCCC
 CCCCCTCCCTCCCCCTTTTTTCCCCTCCCTTTTCTCCCTCCCTTCCCCCCCCCCCCCT
 CCCCCCTTCCCCCTCCTTTTCCCTCCCCCTACTCTCCCTTATCCGCCCTC
 CTCCCCCCTTCCCTTCCCTTCCCCCTCCTCGCCCCCTCCCCCCCCCCCCGACTGT

Restriction Sites:

NotI-NotI

ACCN:

NM_005923

Insert Size:

4700 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

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_005923.3 , NP_005914.1
RefSeq Size:	5215 bp
RefSeq ORF:	4125 bp
Locus ID:	4217
UniProt ID:	Q99683
Cytogenetics:	6q23.3
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Amyotrophic lateral sclerosis (ALS), MAPK signaling pathway, Neurotrophin signaling pathway
Gene Summary:	Mitogen-activated protein kinase (MAPK) signaling cascades include MAPK or extracellular signal-regulated kinase (ERK), MAPK kinase (MKK or MEK), and MAPK kinase kinase (MAPKKK or MEKK). MAPKK kinase/MEKK phosphorylates and activates its downstream protein kinase, MAPK kinase/MEK, which in turn activates MAPK. The kinases of these signaling cascades are highly conserved, and homologs exist in yeast, Drosophila, and mammalian cells. MAPKKK5 contains 1,374 amino acids with all 11 kinase subdomains. Northern blot analysis shows that MAPKKK5 transcript is abundantly expressed in human heart and pancreas. The MAPKKK5 protein phosphorylates and activates MKK4 (aliases SERK1, MAPKK4) in vitro, and activates c-Jun N-terminal kinase (JNK)/stress-activated protein kinase (SAPK) during transient expression in COS and 293 cells; MAPKKK5 does not activate MAPK/ERK. [provided by RefSeq, Jul 2008]