OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC224198

Mapk8ip3 (NM_001163451) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk8ip3 (NM_001163451) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mapk8ip3
Synonyms:	BB120594; D17Wsu15e; JIP-3; Jip3; JSAP1; JSAP1a; JSAP1b; JSAP1c; JSAP1d; mKIAA1066; Syd2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

Fully Sequenced ORF:

>MC224198 representing NM_001163451
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGGAGATCCAGATGGACGAGGGAGGAGGAGTGGTGGTGTACCAAGACGACTACTGCTCGGGCTCGG
TCATGTCGGAGCGTGTGTCGGGCCTGGCGGGCTCCATCTACCGCGAGTTCGAGCGCCTCATTCACTGCTA
TGACGAGGAGGTGGTCAAGGAGCTCATGCCGCTGGTGGTGAACGTGCTGGAGAACCTTGACTCGGTGCTG
AGCGAGAACCAGGAGCACGAGGTGGAGCTGGAGCTCCTACGCGAGGACAACGAGCAGCTGCTCACGCAAT
ACGAGCGCGAGAAGGCGCTGCGCAAACAGGCCGAGGAGAAATTCATCGAATTTGAAGATGCCTTGGAACA
AGAGAAGAAAGAACTCCAGATCCAGGTAGAACATTATGAGTTTCAGACACGCCAGCTGGAGCTAAAGGCC
AAAAACTATGCAGATCAGATTTCCCGACTGGAGGAACGAGAATCGGAGATGAAGAAGGAATACAATGCCC
TGCACCAGCGGCACACAGAGATGATCCAGACCTATGTGGAACACATTGAAAGATCCAAGATGCAGCAAGT
TGGGGGTAGCGGCCAAACAGAAAGCAGCCTGCCCGGGCGGAGGAAGGAGCGTCCCACCTCTCTGAATGTC
TTCCCCCTGGCTGATGGCATGTGTCCAAATGATGAGATGTCTGAGTCAGGCCAGTCCTCAGCAGCTGCAA
CACCCAGTACCACAGGTACCAAGTCCAACACACCCACGTCCTCCGTGCCCTCAGCAGCAGTCACGCCACT
CAACGAGAGCCTACAGCCCCTGGGGGACTATGTCAGTGTCACAAAGAACAACAAGCAGGCCCGAGAGAAG
CGCAATAGCCGTAACATGGAGGTCCAGGTCACCCAAGAGATGCGGAACGTCAGTATCGGCATGGGCAGCA
GTGACGAGTGGTCCGATGTTCAGGACATTATCGACTCCACCCCAGAGCTGGATGTGTGTCCTGAAACCCG
TCTGGAGCGCACAGGAAGCAGCCCAACCCAGGGAATTGTAAACAAAGCTTTTGGAATCAACACTGACTCC
TTGTATCACGAACTCTCCACGGCGGGATCTGAGGTCATCGGGGATGTGGACGAGGGAGCTGATCTCCTAG
GGGAGTTTTCAGTGCGCGATGATTTTTTTGGAATGGGCAAAGAAGTGGGGAACCTGCTGCTGGAGAACTC
ACAGCTTCTAGAGACAAAAAATGCTTTAAATGTAGTGAAGAATGACCTCATTGCTAAGGTTGACCAACTG
TCAGGAGAACAGGAGGTCCTGAAGGGTGAGCTGGAAGCAGCCAAGCAAGCCAAAGTCAAGCTGGAGAACC
GAATCAAAGAGCTTGAAGAAGAACTGAAGAGAGTCAAGTCAGAGGCAGTAACTGCCCGCCGTGAGCCCAG
AGAAGAGGTGGAGGATGTAAGCAGCTATCTCTGTACAGAATTGGACAAAATCCCCATGGCCCAGCGCCGA
CGCTTCACACGGGTGGAGATGGCCCGAGTGCTCATGGAACGCAACCAGTACAAGGAACGCCTCATGGAGC

View online »

TGCAGGAGGCTGTGAGGTGGACTGAAATGATCAGAGCATCAAGGGAACACCCATCTGTCCAGGAGAAGAA
GAAGTCCACCATCTGGCAGTTCTTTAGTCGCCTCTTCAGCTCCTCATCTAGCCCCCCTCCGGCCAAACGA
TCCTACCCATCTGTGAACATTCACTACAAGTCACCCACTGCAGCTGGCTTTAGCCAGCGTCGCAGCCATG
CTTTGTGCCAGATCTCAGCCGGCAGCAGGCCCCTGGAGTTCTTCCCTGATGATGACTGCACCTCTTCTGC
CCGGCGGGAGCAGAAGCGGGAGCAGTACCGCCAGGTTCGTGAACACGTGCGCAATGATGACGGGAGGCTG
CAGGCCTGTGGGTGGAGCCTGCCTGCCAAGTACAAGCAGCTGAGCCCCAATGGAGGCCAGGAAGACACCC
GGATGAAAAATGTGCCTGTCCCTGTGTACTGCCGCCCTCTGGTGGAGAAGGACCCTTCGACAAAGCTGTG
GTGTGCTGCTGGTGTCAACCTGAGTGGGTGGAAGCCACATGAAGAGGACTCTAGCAATGGACCCAAGCCT
GTACCAGGTCGAGACCCTCTGACCTGTGACCGGGAAGGAGAAGGCGAACCCAAGAGCACACACCCATCAC
CTGAGAAGAAGAAGGCAAAGGAAACCCCTGAGGCAGATGCTACCTCCAGTCGGGTATGGATCCTCACCAG
CACCCTGACAACCAGCAAGGTGGTGATCATTGATGCCAACCAGCCAGGCACAATTGTGGATCAGTTCACA
GTCTGCAATGCCCACGTCCTGTGTATCTCCAGCATTCCTGCGGCCAGTGACAGTGACTATCCCCCTGGGG
AGATGTTCCTAGACAGTGATGTGAACCCTGAAGATTCAGGTGCTGATGGTGTGCTGGCTGGCATCACCCT
GGTGGGGTGTGCTACCCGCTGCAATGTTCCACGTAGCAACTGTTCCTCACGAGGAGACACCCCAGTACTG
GACAAGGGGCAGGGGGATGTGGCGACCACTGCCAATGGGAAGGTCAACCCGTCCCAATCCACAGAAGAAG
CCACAGAAGCCACGGAGGTGCCAGACCCTGGTCCCAGCGAGTCAGAAGCAACGACAGTCCGGCCCGGGCC
TCTCACAGAGCATGTCTTTACTGACCCAGCACCCACCCCATCCTCCAGCACCCAGCCTGCCAGTGAGAAT
GGGTCAGAGTCCAATGGCACCATTGTACAGCCTCAGGTGGAGCCCAGTGGGGAACTCTCAACAACAACCA
GTAGCGCTGCACCCACTATGTGGCTAGGAGCCCAGAATGGCTGGCTCTATGTGCATTCAGCGGTAGCCAA
CTGGAAGAAGTGTCTGCACTCCATCAAGCTAAAAGACTCTGTGCTGAGCCTGGTGCATGTCAAAGGCCGA
GTGCTGGTAGCTCTTGCAGATGGGACCCTGGCTATCTTCCATCGTGGAGAGGATGGCCAGTGGGACCTGA
GCAACTACCACCTAATGGACCTGGGCCACCCACACCACTCCATCCGCTGCATGGCTGTTGTGAATGACCG
AGTTTGGTGTGGCTACAAGAACAAGGTGCATGTTATCCAGCCCAAGACAATGCAGATTGAGAAATCATTT
GATGCCCACCCAAGGCGGGAAAGCCAGGTACGTCAGCTGGCCTGGATCGGTGATGGAGTGTGGGTCTCTA
TTCGCTTGGATTCTACCCTTCGGCTCTACCATGCTCACACCCACCAGCACCTGCAGGATGTGGACATTGA
GCCCTATGTTAGCAAGATGCTAGGAACCGGCAAGCTGGGCTTCTCCTTCGTGCGCATCACAGCCTTACTC
ATTGCAGGCAACCGTCTGTGGGTGGGCACTGGCAATGGGGTTGTCATCTCCATCCCCTTGACTGAGACTG
TGGTCCTGCATCGAGGCCAGCTCCTAGGGCTCCGAGCCAACAAGACATCCCCAACATCTGGGGAGGGGAC
CCGCCCAGGGGGCATCATCCATGTGTATGGGGACGACAGCAGTGACAAGGCCGCCAGTAGTTTCATCCCC
TACTGCTCCATGGCACAGGCTCAGCTTTGCTTCCATGGGCACCGTGATGCTGTCAAATTCTTTGTCTCTG
TGCCAGGAAATGTGCTGGCCACTCTCAATGGCAGTGTGCTAGACAGCCCATCAGAGGGCCCTGGGCCTGC
TGCACCCGCTGCAGATGCTGAGGGCCAGAAGTTGAAGAATGCACTGGTGCTGAGTGGTGGTGAAGGTTAC
ATTGACTTCCGTATCGGAGACGGAGAGGATGATGAAACTGAGGAATGTGCCGGGGACGTGAACCAGACAA
AGCCCTCGTTGTCCAAGGCTGAGCGCAGCCACATCATCGTGTGGCAGGTGTCCTACACCCCTGAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001163451

Insert Size: 3918 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).

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_001163451.1, NP_001156923.1

RefSeq Size: 5483 bp

RefSeq ORF: 3918 bp

Locus ID: 30957

UniProt ID: Q9ESN9

Cytogenetics: 17 12.53 cM

Gene Summary: The JNK-interacting protein (JIP) group of scaffold proteins selectively mediates JNK signaling by aggregating specific components of the MAPK cascade to form a functional JNK signaling module. May function as a regulator of vesicle transport, through interactions with the JNK-signaling components and motor proteins (PubMed:10523642, PubMed:10629060). Promotes neuronal axon elongation in a kinesin- and JNK-dependent manner (PubMed:23576431, PubMed:25944905, PubMed:28259553). Activates cofilin at axon tips via local activation of JNK, thereby regulating filopodial dynamics and enhancing axon elongation (PubMed:23576431, PubMed:25944905, PubMed:28259553). Its binding to kinesin heavy chains (KHC), promotes kinesin-1 motility along microtubules and is essential for axon elongation and regeneration (PubMed:23576431, PubMed:25944905, PubMed:28259553). Regulates cortical neuronal migration by mediating NTRK2/TRKB anterograde axonal transport during brain development (PubMed:23576431, PubMed:25944905, PubMed:28259553). Acts as an adapter that bridges the interaction between NTRK2/TRKB and KLC1 and drives NTRK2/TRKB axonal but not dendritic anterograde transport, which is essential for subsequent BDNF-triggered signaling and filopodia formation (PubMed:23576431, PubMed:25944905, PubMed:28259553).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (6) uses two alternate in-frame splice sites in the 5' coding region compared to variant 1. This results in a shorter protein (isoform f) compared to isoform a. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.