

## Product datasheet for **MR210109**

### Mapk8ip1 (BC072578) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mapk8ip1 (BC072578) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mapk8ip1
Synonyms:	JIP-1, IB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR210109 representing BC072578  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCAGCTGGTACTGAAGATGGATTCGAGCCCAGACAATGACAGCTGGTTGGAGGATCAGTGGGAGCACT  
 GGCTCACCCATGACATCAGCCTGGAGGAGTTGAGGATGAAGACCTTTCGGAGATCACTGACGAGTGTGG  
 CATCAGCCTGCAGTGCAAAGACACCCTGTCTCTCCGGCCCCCGCGCCGGGCTGCTGTCTGCGGGTAGC  
 AGCGGCAGCGCGGGGAGCCGGCTGCAGGCGGAGATGCTGCAGATGGACCTGATCGACGCGCAGGTGACA  
 TTCCGGGCGCCGAGGACGACGAGGAGGAGGAGGACGACGAGCTCGCTGCCAACGACCAGGAGTGGGGCC  
 TCCCAAAGCGGAGTCCAACCAGGATCCGGCGCCTCGCAGCCAGGGCCAGGGCCCCGGGCACAGGCAGCGGA  
 GACACCTACCGACCCAAGAGGCCTACCACGCTCAACCTTTCCCGCAGGTGCCGGGTCTCAGGACACGC  
 TGAATAATAACTCTTTAGGCAAAAAGCACAGTTGGCAGGACCGTGTGTCTCGATCATCTCCCTCTGAA  
 GACAGGAGAACAGACGCCTCCACATGAACACATCTGCCTGAGTGTGAGCTGCCACCCAGGGCAGTCTCT  
 GTTCCACCCAGGACCGCGGCACTTCCACCGACAGCCCTTGTCCGCGAAGTGCAGCCACCCAGATGGCAC  
 CTCCAAGCGGTCCCCCTGCCACTGCGCCTGGTGGCCGGGGCCACTCCCATCGAGACCGAATCCACTACCA  
 GGCAGATGTGCGGCTCGAGGCGACTGAGGAGATCTACCTGACCCAGTGCAGAGGCCCCAGACCCTGCA  
 GAACCCACCTCCACCTTCATGCCACCCAGGAGAGCCGGATGTCAGTTAGCTCCGATCCAGACCCTGCCG  
 CTTACTCTGTAAGTGGGGGGCGGCCACACCCCTCCATCAGTGAAGAGGATGAGGGCTTCGACTGCCTGTC  
 ATCCCCAGAGCGAGCTGAGCCACCAGGTGGAGGGTGGCGGGGAAGCCTCGGGGAGCCACCACCGCCTCCA  
 CGGGCCTCACTGAGCTCGACACCAGCGCACTGTCTACGACTCGGTCAAGTACACACTGGTGGTGGATG  
 AACATGCCAGCTTGTGTTGGTGGCTGCGGCCGTGCTTTGGAGATTACAGTGACGAAAGCGACTCTGC  
 CACTGTCTATGACAACTGTGCCTCTGCCTCCTCGCCCTACGAGTACGCCATTGGTGAGGAGTATGAGGAG  
 GCCCTCAGCCCCGCGCTCCACCTGCCTCTCAGAGGACTCCACCCGGATGAGCCTGATGTCCACTTCT  
 CTAAGAAGTTTCTGAATGTCTTCATGAGTGGCCGCTCTCGTTCCTCCAGTGTGAGTCTTTGGGCTGTT  
 CTCCTGCGTCATCAATGGGGAGGAGCATGAGCAAACCCATCGGGCTATATTCAGGTTTGTGCCTCGGCAT  
 GAAGATGAACTTGTGAGTGGAAAGTGGATGACCCCTGCTGGTGGAGCTGCAGGCAGAAGACTATTGGTATG  
 AGGCCTATAACATGCGCACCGGAGCCCGCGGGTCTTCCCTGCCTACTATGCCATTGAGGTACCAAGGA  
 GCCTGAGCACATGGCAGCCCTTGCCAAAACAGCGACTGGATTGACCAGTTCGGGTGAAGTTCTGGGG  
 TCTGTCCAGGTTCTTATCACAAGGGCAATGATGTCCTCTGTGCTGCTATGCAAAAGATCGCCACCACC  
 GCCGGCTCACCGTGCACCTTAACCCGCCCTCCAGCTGTGCTCCTTGAGATCAGTGTGAGGGGTGTCAAGAT  
 AGGCGTCAAAGCTGATGATGCTCTGGAGGCAAGGAAATAAATGTAGCCACTTCTTCCAGCTAAAGAAC  
 ATCTCTTTCTGTGGATACCATCCAAAGAATAACAAGTACTTTGGGTTTATCACTAAGCACCTGTGACC  
 ACCGGTTTGCCTGCCATGTCTTTGTGTCTGAAGATTCCACCAAAGCCCTGGCGGAGTCTGTGGGGCGTGC  
 ATTTACAGCAGTTCTACAAGCAGTTTGTGGAGTATACCTGTCTACAGAAGATATCTACTTGGAG

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR210109 representing BC072578  
Red=Cloning site Green=Tags(s)

MQLVLKMDSSPDNDSWLEDQWEHWLTHDISLEEFEDLSEITDECGISLQCKDTLSLRPPRAGLLSAGS  
 SGSAGSRLQAEMLQMDLIDAAGDIPGAEDDEEEDEDELAQRPGVGPPEAKAESNQDPAPRSQGGPGTGSG  
 DTYRPKRPTTLNLFQVPRSQDTLNNNSLGGKHSWQDRVSRSSSPLKTGEQTPPHEHICLSDLEPPQSGP  
 VPTQDRGTSTDSPCRRAATQMAPPSPGPPATAPGGRGHSHRDRIHQADVRLATEEIIYLTPVQRPPDPA  
 EPTSTFMPPTESRMSVSSDPDPAAYSVTAGRPHPSISEEDEGFDCLSSPERAEPGGGWRGSLGEP PPPP  
 RASLSSDTSALSYDSVKYTLVVDEHAQLELVSLRPCFGDYSDSDSATVYDNCASASSPYESAIGEEYEE  
 APQPRPTCLSEDSTPDEPDVHFSKKFLNVFMSGRSRSSSAESFGLFSCVINGEEHEQTHRAIFRFVPRH  
 EDELELVDDPLLVELQAEDYWEAYNMRTGARGVFPAYYAEVTKPEPHMAALAKNSDWIDQFRVKFLG  
 SVQVPYHKGNLCAAMQKIATRRRLTVHFNPPSSCVLEISVRGVKIGVKADDALEAKGNKCSHFFQLKN  
 ISFCGYHPKNNKYFGFITKHPADHRFACHVVFVSEDSTKALAESVGRAFQQFYKQFVEYTCPTEDIYLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**ACCN:** BC072578

**ORF Size:** 2094 bp

**OTI Disclaimer:** 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [BC072578](#), [AAH72578](#)

**RefSeq Size:** 3138 bp

**RefSeq ORF:** 2096 bp

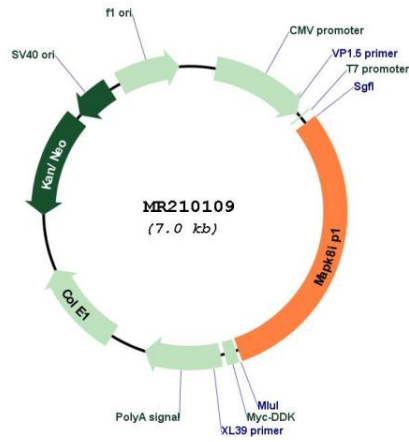
**Locus ID:** 19099

**Cytogenetics:** 2 E1

**MW:** 115.1 kDa

**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. Required for JNK activation in response to excitotoxic stress. Cytoplasmic MAPK8IP1 causes inhibition of JNK-regulated activity by retaining JNK in the cytoplasm and thus inhibiting the JNK phosphorylation of c-Jun. May also participate in ApoER2-specific reelin signaling. Directly, or indirectly, regulates GLUT2 gene expression and beta-cell function. Appears to have a role in cell signaling in mature and developing nerve terminals. May function as a regulator of vesicle transport, through interactions with the JNK-signaling components and motor proteins. Functions as an anti-apoptotic protein and whose level seems to influence the beta-cell death or survival response (By similarity). Acts as a scaffold protein that coordinates with SH3RF1 in organizing different components of the JNK pathway, including RAC1 or RAC2, MAP3K11/MLK3 or MAP3K7/TAK1, MAP2K7/MKK7, MAPK8/JNK1 and/or MAPK9/JNK2 into a functional multiprotein complex to ensure the effective activation of the JNK signaling pathway. Regulates the activation of MAPK8/JNK1 and differentiation of CD8(+) T-cells (PubMed:23963642).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210109