

## Product datasheet for **RC209734**

### **JIP1 (MAPK8IP1) (NM\_005456) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	JIP1 (MAPK8IP1) (NM_005456) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	JIP1
Synonyms:	IB1; JIP-1; JIP1; PRKM8IP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC209734 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCGGAGCGAGAAAGCGGCGCCTGGGAGGGGGGCGCGTCCCCGCCGCCGCTCCCCGTTCTCTGG  
 GGCTGCACATCGCTTCGCTCCCAATTTACGGCTCACCCATGACATCAGCCTGGAGGAGTTTGAGGATGA  
 AGACCTCTCGGAGATCACTGATGAGTGTGGCATCAGCTTACAGTGCAAAGACACCCTGTCCTTACGGCCC  
 CCGCGCGCCGGGCTGCTCTCTGCGGGCGGCGGGCGCGGGGAGCCGGTTGCAGGCCGAGATGCTGCAGA  
 TGGACCTGATCGACGCGACGGGGACACTCCCGGGGCGGAGGACGACGAGGAGGACGACGACGAGGAGCG  
 CGCGGCCCGGGCGGGAGCGGGGCGGCCAAGGCCGAGTCCGGCCAGGAGCCGGCGTCCCGGGCCAG  
 GGCCAGAGCCAAGGCCAGAGCCAGGGCCCGGGACGCGGGACACGTACCGGCCAAGCGGCCACCACGC  
 TCAACCTCTTCCGAGGTGCCCGGTCTCAGGACACACTGAATAATAATTCTCTGGGCAAAAAGCACAG  
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 ATCTGCGTGAGCGATGAGCTGTCCCCCAGAGCGGCCCGGCCCCACCACAGGTCGAGGCACCTCCACCG  
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 AGAGCCGATGTCAGTCACTCCGATCCAGACCTGCCGCTACCCCTCCACGGCAGGGCGGGCCGACCC  
 CTCCATCAGTGAAGAGGAAGAGGGCTTCGACTGCATGTCGTCCCAGAGCGGGCTGAGCCCCAGGCGGA  
 GGGTGGCGGGGAGCCTGGGGAGCCCGCCACCTCCACGGGCTCTCTGAGCTCGACACCAGCGCCC  
 TGTCTATGACTCTGCAAGTACACGCTGGTGGTAGATGACATGCACAGCTGGAGCTGGTGGAGCTGCG  
 GCCGTGCTTCGGAGACTACAGTGACGAGAGTGACTCTGCCACCGTCTATGACAACGTGCTCCCTCCGTCTC  
 TCGCCCTATGAGTCGGCCATCGGAGAGGAATATGAGGAGGCCCGCGGCCCCAGCCCCCTGCCTGCCTCT  
 CCGAGGACTCCACGCCTGATGAACCCGACGTCCATTTCTCCAAGAAATTCCTGAACGTCTTCATGAGTGG  
 CCGCTCCCGCTCCTCCAGTGCTGAGTCTTCGGGCTGTTCTCCTGCATCATCAACGGGGAGGAGCAGGAG  
 CAGACCCACCGGCCATATTCAGGTTTGTGCTCGACACGAAGACGAACCTGAGCTGGAAGTGGATGACC  
 CTCTGCTAGTGGAGCTCCAGGCTGAAGACTACTGGTACGAGGCCACAACATGCGCACTGGTGCCCGGG  
 TGTCTTCTGCCTATTACGCCATCGAGGTCACCAAGGAGCCGAGCACATGGCAGCCCTGGCCAAAAC  
 AGTGACTGGGTGGACCAGTTCGGGTGAAGTTCCTGGGCTCAGTCCAGGTTCCCTATCACAAGGGCAATG  
 ACGTCCTCTGTGCTGCTATGCAAAAGATTGCCACCACCCGCCGGCTCACCGTGCACCTTAACCCGCCCTC  
 CAGCTGTGTCCTGGAGATCAACGTGCGGGGTGTAAGATAGGCGTCAAGGCCGATGACTCCAGGAGGCC  
 AAGGGGAATAATGTAGCCACTTTTCCAGTAAAAAACATCTCTTTCTGCGGATATCATCAAAGAACA  
 ACAAGTACTTTGGGTTTCATACCAAGCACCCCGCCGACAACCGGTTTGCCTGCCACGTCTTTGTGTCTGA  
 AGACTCCACCAAAGCCCTGGCAGAGTCCGTGGGGAGAGCATTCCAGCAGTTCTACAAGCAGTTTGTGGAG  
 TACACCTGCCCCACAGAAGATATCTACCTGGAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC209734 protein sequence  
Red=Cloning site Green=Tags(s)

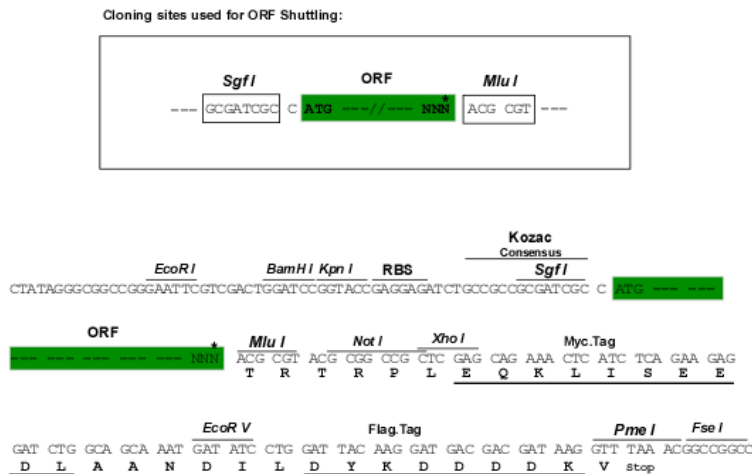
MAERESGGLGGGAASPPAASPFLGLHIASPPNFRLTHDISLEEFEDLSEITDECGISLQCKDTLSLRP  
 PRAGLLSAGGGGAGSRLQAEMLQMDLIDATGDTPGAEDDEEDDEERAARRPGAGPPKAESGQEPASRGQ  
 GQSQGQSQGPGSGD TYRPKRPTTLNLPQVPRSQDTLNNNSLGGKHSWQDRVSRSSSPLKTGEQTPPHEH  
 ICVSDLELSPQSGPAPTTGRGTSTDSPCRRSTATQMAPPGGPPAATPGGRGHSHRDRIHVQADVRLATEE  
 IYLTVPVQRPPDAAEPTSAFLPPTESRMSVSSDPDPAAYPSTAGRPHPSISEEEEGFDCMSSPERAEPGG  
 GWRGSLGEPPPPRASSLSDTSALSYSVKYTLVVDEHAQLELVSLRPCFGDYSDESATSATVYDNCASVS  
 SPYESAIGEEYEEAPRPQPPACLSEDSTPDEPDVHFSKKFLNVFMSGRSRSSAESFGLFSCIINGEEQE  
 QTHRAIFRFVPRHEDELELVDDPLLVELQAEDYWYEA YNMRTGARGVFPAYYAEVTKPEPHEMAALAKN  
 SDWVDQFRVKFLGSVQVPYHKGNDVLCAMQKIATTRRLTVHFNPPSSCVLEINVRGVKIGVKADDSQEA  
 KGNKCSHFFQLKNI SFCGYHPKNNKYFGFITKHPADNRFACHVFVSEDSTKALAESVGRAFQQFYKQFVE  
 YTCPTEDIYLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6834\\_a01.zip](https://cdn.origene.com/chromatograms/mk6834_a01.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_005456

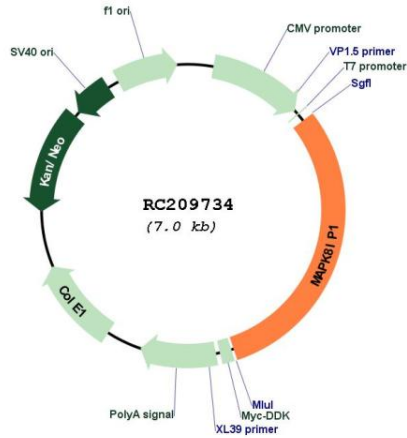
**ORF Size:** 2133 bp

**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](#)

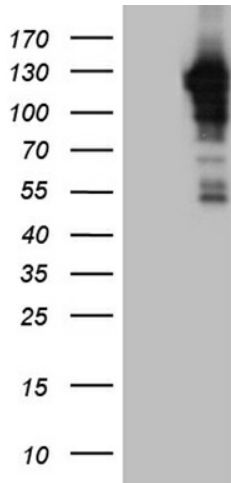
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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_005456.4</a>
<b>RefSeq Size:</b>	3234 bp
<b>RefSeq ORF:</b>	2136 bp
<b>Locus ID:</b>	9479
<b>UniProt ID:</b>	<a href="#">Q9UQF2</a>
<b>Cytogenetics:</b>	11p11.2
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	MAPK signaling pathway
<b>MW:</b>	77.5 kDa
<b>Gene Summary:</b>	This gene encodes a regulator of the pancreatic beta-cell function. It is highly similar to JIP-1, a mouse protein known to be a regulator of c-Jun amino-terminal kinase (Mapk8). This protein has been shown to prevent MAPK8 mediated activation of transcription factors, and to decrease IL-1 beta and MAP kinase kinase 1 (MEKK1) induced apoptosis in pancreatic beta cells. This protein also functions as a DNA-binding transactivator of the glucose transporter GLUT2. RE1-silencing transcription factor (REST) is reported to repress the expression of this gene in insulin-secreting beta cells. This gene is found to be mutated in a type 2 diabetes family, and thus is thought to be a susceptibility gene for type 2 diabetes. [provided by RefSeq, May 2011]

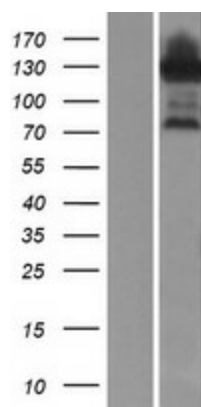
Product images:



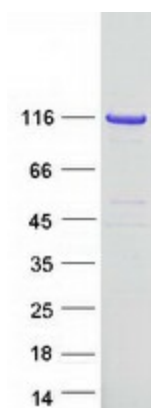
Circular map for RC209734



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MAPK8IP1 (Cat# RC209734, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MAPK8IP1 (Cat# [TA809895])(1:2000). Positive lysates [LY417296] (100ug) and [LC417296] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417296]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209734 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAPK8IP1 protein (Cat# [TP309734]). The protein was produced from HEK293T cells transfected with MAPK8IP1 cDNA clone (Cat# RC209734) using MegaTran 2.0 (Cat# [TT210002]).