

Product datasheet for **MR207122**

Wipi1 (NM_145940) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wipi1 (NM_145940) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Wipi1
Synonyms:	4930533H01Rik; AW411817; D11Ertd498e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR207122 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGGCCGAAGCCGAGATGCCCTCCGGGCCGAGTGGAGCGCGCTCAGCTGCTTCTTTCAACC
 AAGACTGCACATCCCTAGCGATTGGAACCAAGGCCGTTACAAGCTGTTTTCTCTGAGTTCTGTGGAGCA
 GCTTGACCAAGTCCATGGAAGCAATGAAATCCCTGACGTGTATATCGTGGAGCGCTCTTCTCCAGCAGC
 CTGTTGTAGTGGTCAGTCACACAAAACCTCGGCAGATGAACGTCTACCATTTCAAGAAAGGCACTGAGA
 TCTGTAATTACAGCTACTCCAGCAACATTTTGTCTATTCGGCTCAACCGACAGAGGCTGCTGGTCTGCCT
 GGAAGAATCCATCTATATCCACAACATTAAGGATATGAAGTTATTGAAGACCGTCTGGATATCCCTCA
 AACCCAACAGGTCTCTGTGCCCTGTCTATCAACCATTCCAACCTTACCTGGCCTATCCTGGAAGCCAGA
 GTACAGGGCAGATTGACTCTATGATGAAACTCCCTGAAAACGGTGTGCACCATTGCTGCCACGAGGG
 GACGCTGGCCGCTATCACCTTCAACTCCTCGGGCTCCAAGCTAGCAAGCGCGTCTGAAAAAGGCACTGTC
 ATCCGAGTGTTCTCTGTTCCCGAGGGCCAGAACTCTATGAGTTTCGTCGAGGAATGAAAAGGTATGTGA
 CAATCAGCTCCCTGGTGTTCAGTATGGACTCCCAGTTCCTGTGTGCCCTCCAGCAACACGGAGACCGTGCA
 CATCTTCAAGATGGAACACCTGACAGACAGCCGCCAGAAGAGCCTTCCACCTGGAGCGGCTACATGGGA
 AAGATGTTTCATGGCAGCTACCAACTACCTCCCCGCCAGGTGTCCGACATGATGAACCAGGACAGGGCTT
 TCGCCACAGGACGCTGAACTTCTCTGGGCAGAAGAACATTTGCACCCTGTCCACGATCCAGAACTGCC
 GCGGTTGCTGGTGGCCTCCTCCGACGGACCTTTACATCTACAACCTGGACCCACAGGATGGAGGAGAA
 TGTGTCTAATCAAACCCACAGCTTGTAGCTCAGGAACAACAGAAGAGAACAAGAAAATGACCTCA
 GACCTTCTTACCTCCATCTTATGCTGCAACTGTAGCAAGGCCAGCACGCTCTGCAGCTCCACGCTGCC
 AGGATACTCTGAGGACGGCGGGGCGCTCCGAGGGGAAGTTATTCCGGAACACGAGTTTGGCAGCGGACCA
 GTGTGTCTAGACGACGAGAATGAGTTTCCCCTATAATCTTGTGCCGTGGAAGTCAGAAGGGCAAAACGA
 AGCAGTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207122 protein sequence
 Red=Cloning site Green=Tags(s)

MEAEAADAPPGRVEAALSCFSFNQDCTSLAIGTKAGYKLFSLSSVEQLDQVHGSNEIPDVYIVERLFSS
 LVVVVSHTKPRQMNVYHFKKGTEICNYSYSSNILSIRLNQRLLVCLLEESIYIHNKMDKLLKTVDIPS
 NPTGLCAL SINHSNSYLAYPGSQSTGEIVLYDGNLSLKTIVCTIAAHEGLAAITFNSSGSKLASASEKGT
 IRVFSVPEGQKLYEFRGMKRYVTISSLVFSMDSQFLCASSNTEVVIHFMEHLTDSRPEEPSTWSGYMG
 KMFMAATNYLPAQVSDMMNQDRAAFATGRLNFSGQKNICTLSTIQKLPRLLVASSDGHLYIYNLDPQDGE
 CVLIKTHSLLSSGTTEENKENDLRPSLPPSYAATVARPSTSAASTVPGYSEDGGALRGEV IPEHEFATGP
 VCLDDENEFPPIILCRGSQKGTKQS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_145940

ORF Size: 1341 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.

RefSeq: [NM_145940.2](#), [NP_666052.1](#)

RefSeq Size: 1817 bp

RefSeq ORF: 1341 bp

Locus ID: 52639

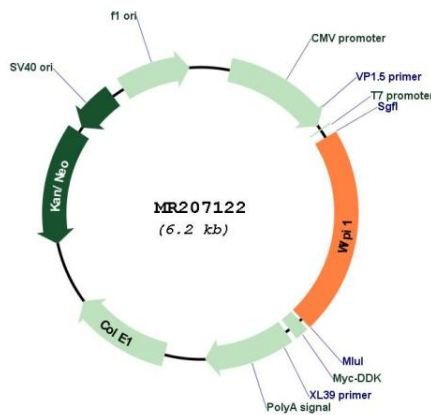
UniProt ID: [Q8R3E3](#)

Cytogenetics: 11 72.18 cM

MW: 48.8 kDa

Gene Summary: Component of the autophagy machinery that controls the major intracellular degradation process by which cytoplasmic materials are packaged into autophagosomes and delivered to lysosomes for degradation. Plays an important role in starvation- and calcium-mediated autophagy, as well as in mitophagy (By similarity) (PubMed:22275429). Functions downstream of the ULK1 and PI3-kinases that produce phosphatidylinositol 3-phosphate (PtdIns3P) on membranes of the endoplasmic reticulum once activated. Binds phosphatidylinositol 3-phosphate (PtdIns3P), and maybe other phosphoinositides including PtdIns3,5P2 and PtdIns5P, and is recruited to phagophore assembly sites at the endoplasmic reticulum membranes. There, it assists WIPI2 in the recruitment of ATG12-ATG5-ATG16L1, a complex that directly controls the elongation of the nascent autophagosomal membrane. Involved in xenophagy of *Staphylococcus aureus*. Invading *S.aureus* cells become entrapped in autophagosome-like WIPI1 positive vesicles targeted for lysosomal degradation. Plays also a distinct role in controlling the transcription of melanogenic enzymes and melanosome maturation, a process that is distinct from starvation-induced autophagy. May also regulate the trafficking of proteins involved in the mannose-6-phosphate receptor (MPR) recycling pathway (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR207122