

Product datasheet for **MG207122**

Wipi1 (NM_145940) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Wipi1 (NM_145940) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Wipi1
Synonyms:	4930533H01Rik; AW411817; D11Ertd498e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG207122 representing NM_145940
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGCCGAAGCCGCAGATGCCCTCCGGGCCGAGTGGAGCGCGCTCAGCTGCTTCTTTCAACC
 AAGACTGCACATCCCTAGCGATTGGAACCAAGGCCGTTACAAGCTGTTTTCTCTGAGTTCTGTGGAGCA
 GCTTGACCAAGTCCATGGAAGCAATGAAATCCCTGACGTGTATATCGTGGAGCGCTCTTCTCCAGCAGC
 CTGTTGTAGTGGTCAGTCACACAAAACCTCGGCAGATGAACGTCTACCATTTCAAGAAAGGCACTGAGA
 TCTGTAATTACAGCTACTCCAGCAACATTTTGTCTATTCCGGCTCAACCGACAGAGGCTGCTGGTCTGCCT
 GGAAGAATCCATCTATATCCACAACATTAAGGATATGAAGTTATTGAAGACCGTCTGGATATCCCTCA
 AACCCAACAGGTCTCTGTGCCCTGTCTATCAACCATTCCAACCTTACCTGGCCTATCCTGGAAGCCAGA
 GTACAGGGCAGATTGTACTCTATGATGAAACTCCCTGAAAACGGTGTGCACCATTGCTGCCACGAGGG
 GACGCTGGCCGCTATCACCTTCAACTCCTCGGGCTCCAAGCTAGCAAGCGCGTCTGAAAAAGGCACTGTC
 ATCCGAGTGTTCTCTGTTCCCGAGGGCCAGAACTCTATGAGTTTCGTCGAGGAATGAAAAGGTATGTGA
 CAATCAGCTCCCTGGTGTTCAGTATGGACTCCCAGTTCCTGTGTGCCCTCCAGCAACACGGAGACCGTGCA
 CATCTTCAAGATGGAACACCTGACAGACAGCCGCCAGAAGAGCCTTCCACCTGGAGCGGTACATGGGA
 AAGATGTTTCATGGCAGCTACCAACTACCTCCCCGCCAGGTGTCCGACATGATGAACCAGGACAGGGCTT
 TCGCCACAGGACGCTGAACTTCTCTGGGCAGAAGAACATTTGCACCCTGTCCACGATCCAGAACTGCC
 GCGGTTGCTGGTGGCCTCCTCCGACGGACCTTTACATCTACAACCTGGACCCACAGGATGGAGGAGAA
 TGTGTCTAATCAAACCCACAGCTTGTAGCTCAGGAACAACAGAAGAGAACAAGAAAATGACCTCA
 GACCTTCTTACCTCCATCTTATGTGCAACTGTAGCAAGGCCACGACGCTCTGCAGCTCCACGGTGGC
 AGGATACTCTGAGGACGGCGGGGCGCTCCGAGGGGAAGTTATTCCGGAACACGAGTTTGGCAGCGGACCA
 GTGTGTCTAGACGACGAGAATGAGTTTCCCCTATAATCTTGTGCCGTGGAAGTCAGAAGGGCAAAACGA
 AGCAGTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207122 representing NM_145940
 Red=Cloning site Green=Tags(s)

MEAEAADAPPGRVEAALSCFSFNQDCTSLAIGTKAGYKLFSLSSVEQLDQVHGSNEIPDVYIVERLFFSS
 LVVVVSHTKPRQMNVYHFKKGTEICNYSYSSNILSIRLNQRLLVCLLEESYIHNKMDKLLKTVLDIPS
 NPTGLCAL SINHSNSYL AYPGSQSTGEIVLYDGNLSLKTIVCTIAAHEGLAAITFNSSGSKLASASEKGTV
 IRVFSVPEGQKLYEFRGMKRYVTISSLVFSMDSQFLCASNTEVHIFKMEHLTDSRPEEPSTWSGYMG
 KMFMAATNYLPAQVSDMMNQDRAFATGRLNFSGQKNICTLSTIQKLPRLLVASSDGHLYIYNLDPQDGGE
 CVLIKTHSLLSSGTTEENKENDLRPSLPPSYAATVARPSTSAASTVPGYSEDGGALRGEVPEHEFATGP
 VCLDDENEFPPIILCRGSQKGTKQS

TRTRPLE - GFP Tag - V

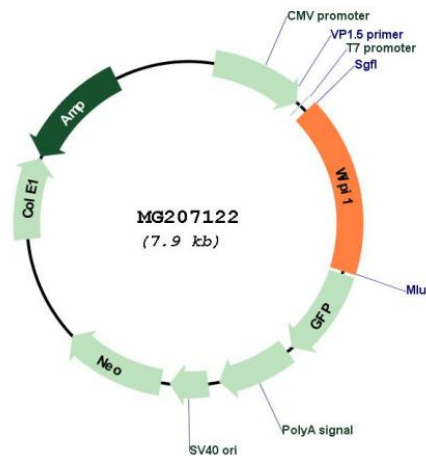
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_145940

ORF Size: 1338 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:	<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:	<u>NM_145940.2</u> , <u>NP_666052.1</u>
RefSeq Size:	1817 bp
RefSeq ORF:	1341 bp
Locus ID:	52639
UniProt ID:	<u>Q8R3E3</u>
Cytogenetics:	11 72.18 cM
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]