

Product datasheet for MR207122L4V

OriGene Technologies, Inc.

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Wipi1 (NM 145940) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Wipi1 (NM_145940) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Wipi

Synonyms: 4930533H01Rik; AW411817; D11Ertd498e

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_145940 **ORF Size:** 1341 bp

ORF Nucleotide

- 1

Sequence:

The ORF insert of this clone is exactly the same as(MR207122).

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

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.

RefSeq: <u>NM 145940.2</u>, <u>NP 666052.1</u>

RefSeq Size: 1817 bp
RefSeq ORF: 1341 bp
Locus ID: 52639
UniProt ID: Q8R3E3

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 3phosphate (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]