

Product datasheet for **MR215461L4V**

Mark4 (NM_172279) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Mark4 (NM_172279) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Mark4
Synonyms:	2410090P21Rik; C79806; Mark11
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_172279
ORF Size:	2256 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR215461).
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.
RefSeq:	NM_172279.1
RefSeq Size:	2259 bp
RefSeq ORF:	2259 bp
Locus ID:	232944
UniProt ID:	Q8CIP4
Cytogenetics:	7 A3



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Gene Summary:

Serine/threonine-protein kinase (By similarity). Phosphorylates the microtubule-associated protein MAPT/TAU (By similarity). Also phosphorylates the microtubule-associated proteins MAP2 and MAP4 (By similarity). Involved in regulation of the microtubule network, causing reorganization of microtubules into bundles (By similarity). Required for the initiation of axoneme extension during cilium assembly (By similarity). Regulates the centrosomal location of ODF2 and phosphorylates ODF2 in vitro (By similarity). Plays a role in cell cycle progression, specifically in the G1/S checkpoint (By similarity). Reduces neuronal cell survival (By similarity). Plays a role in energy homeostasis by regulating satiety and metabolic rate (PubMed:22992738). Promotes adipogenesis by activating JNK1 and inhibiting the p38MAPK pathway, and triggers apoptosis by activating the JNK1 pathway (PubMed:24989893). Phosphorylates mTORC1 complex member RPTOR and acts as a negative regulator of the mTORC1 complex, probably due to disruption of the interaction between phosphorylated RPTOR and the RRAGA/RRAGC heterodimer which is required for mTORC1 activation (By similarity).[UniProtKB/Swiss-Prot Function]