

OriGene Technologies, Inc.

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Product datasheet for MR225392L3V

Mertk (NM_008587) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Mertk (NM_008587) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Mertk
Synonyms:	Eyk; Mer; nmf12; Nyk
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_008587
ORF Size:	2982 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR225392).
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. <u>More info</u>
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 008587.1</u>
RefSeq Size:	3564 bp
RefSeq ORF:	2985 bp
Locus ID:	17289
UniProt ID:	<u>Q60805</u>
Cytogenetics:	2 F1



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Gene Summary:Receptor tyrosine kinase that transduces signals from the extracellular matrix into the
cytoplasm by binding to several ligands including LGALS3, TUB, TULP1 or GAS6. Regulates
many physiological processes including cell survival, migration, differentiation, and
phagocytosis of apoptotic cells (efferocytosis). Ligand binding at the cell surface induces
autophosphorylation of MERTK on its intracellular domain that provides docking sites for
downstream signaling molecules. Following activation by ligand, interacts with GRB2 or
PLCG2 and induces phosphorylation of MAPK1, MAPK2, FAK/PTK2 or RAC1. MERTK signaling
plays a role in various processes such as macrophage clearance of apoptotic cells, platelet
aggregation, cytoskeleton reorganization and engulfment. Functions in the retinal pigment
epithelium (RPE) as a regulator of rod outer segments fragments phagocytosis. Plays also an
important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response by
activating STAT1, which selectively induces production of suppressors of cytokine signaling
SOCS1 and SOCS3.[UniProtKB/Swiss-Prot Function]

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