

## Product datasheet for **MR207063L3V**

### **Nek2 (NM\_010892) Mouse Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Nek2 (NM_010892) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Nek2
Synonyms:	AA617254; C77054
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_010892
ORF Size:	1332 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR207063).
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. <a href="#">More info</a>
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:	<a href="#">NM_010892.1</a> , <a href="#">NP_035022.1</a>
RefSeq Size:	3218 bp
RefSeq ORF:	1332 bp
Locus ID:	18005
UniProt ID:	<a href="#">O35942</a>
Cytogenetics:	1 96.94 cM



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**Gene Summary:**

Protein kinase which is involved in the control of centrosome separation and bipolar spindle formation in mitotic cells and chromatin condensation in meiotic cells. Regulates centrosome separation (essential for the formation of bipolar spindles and high-fidelity chromosome separation) by phosphorylating centrosomal proteins such as CROCC, CEP250 and NINL, resulting in their displacement from the centrosomes. Regulates kinetochore microtubule attachment stability in mitosis via phosphorylation of NDC80. Involved in regulation of mitotic checkpoint protein complex via phosphorylation of CDC20 and MAD2L1. Plays an active role in chromatin condensation during the first meiotic division through phosphorylation of HMGA2. Phosphorylates: PPP1CC; SGO1; NECAB3 and NPM1. Essential for localization of MAD2L1 to kinetochore and MAPK1 and NPM1 to the centrosome. Phosphorylates CEP68 and CNTLN directly or indirectly (By similarity). NEK2-mediated phosphorylation of CEP68 promotes CEP68 dissociation from the centrosome and its degradation at the onset of mitosis (By similarity). Phosphorylates and activates NEK11 in G1/S-arrested cells. Involved in the regulation of centrosome disjunction (By similarity).[UniProtKB/Swiss-Prot Function]