

## Product datasheet for MR210191L3V

## OriGene Technologies, Inc.

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## Ngef (NM\_001111314) Mouse Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Ngef (NM\_001111314) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Ngef

**Synonyms:** ephexin; Tims2

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM\_001111314

ORF Size: 2133 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR210191).

OTI Disclaimer:

Sequence:

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:** <u>NM 001111314.1</u>, <u>NP 001104784.1</u>

 RefSeq Size:
 3127 bp

 RefSeq ORF:
 2133 bp

 Locus ID:
 53972

 UniProt ID:
 Q8CHT1

 Cytogenetics:
 1 44.42 cM







## **Gene Summary:**

Acts as a guanine nucleotide exchange factor (GEF) which differentially activates the GTPases RHOA, RAC1 and CDC42. Plays a role in axon guidance regulating ephrin-induced growth cone collapse and dendritic spine morphogenesis. Upon activation by ephrin through EPHA4, the GEF activity switches toward RHOA resulting in its activation. Activated RHOA promotes cone retraction at the expense of RAC1- and CDC42-stimulated growth cone extension. [UniProtKB/Swiss-Prot Function]