

## **Product datasheet for SR417154**

## OriGene Technologies, Inc.

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# Mapk15 Mouse siRNA Oligo Duplex (Locus ID 332110)

### **Product data:**

**Product Type:** siRNA Oligo Duplexes

Purity: HPLC purified

**Quality Control:** Tested by ESI-MS

Sequences: Available with shipment

**Stability:** One year from date of shipment when stored at -20°C.

# of transfections: Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final

conc. 10 nM).

**Note:** Single siRNA duplex (10nmol) can be ordered.

**RefSeq:** <u>NM 177922</u>

UniProt ID: Q80Y86

Synonyms: BC048082

Components: Mapk15 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 332110)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml



#### Summary:

Atypical MAPK protein that regulates several process such as autophagy, ciliogenesis, protein trafficking/secretion and genome integrity, in a kinase activity-dependent manner (By similarity) (PubMed:25823377). Controls both, basal and starvation-induced autophagy throught its interaction with GABARAP, MAP1LC3B and GABARAPL1 leading to autophagosome formation, SQSTM1 degradation and reduced MAP1LC3B inhibitory phosphorylation. Regulates primary cilium formation and the localization of ciliary proteins involved in cilium structure, transport, and signaling. Prevents the relocation of the sugaradding enzymes from the Golgi to the endoplasmic reticulum, thereby restricting the production of sugar-coated proteins. Upon amino-acid starvation, mediates transitional endoplasmic reticulum site disassembly and inhibition of secretion. Binds to chromatin leading to MAPK15 activation and interaction with PCNA, that which protects genomic integrity by inhibiting MDM2-mediated degradation of PCNA. Regulates DA transporter (DAT) activity and protein expression via activation of RhoA. In response to H(2)O(2) treatment phosphorylates ELAVL1, thus preventing it from binding to the PDCD4 3' UTR and rendering the PDCD4 mRNA accessible to miR-21 and leading to its degradation and loss of protein expression (By similarity). Also functions in a kinase activity-independent manner as a negative regulator of growth (By similarity). Phosphorylates in vitro FOS and MBP (By similarity). During oocyte maturation, plays a key role in the microtubule organization and meiotic cell cycle progression in oocytes, fertilized eggs, and early embryos (PubMed:23351492). Interacts with ESRRA promoting its re-localization from the nucleus to the cytoplasm and then prevents its transcriptional activity (By similarity).[UniProtKB/Swiss-Prot Function]

#### Performance Guaranteed:

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).