

## **Product datasheet for SR414146**

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## Ngfr Mouse siRNA Oligo Duplex (Locus ID 18053)

### **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:
 NM 033217

 UniProt ID:
 Q9Z0W1

Synonyms: LNGFR; p75; p75NGFR; p75NTR; Tnfrsf16

Components: Ngfr (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 18053)

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

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



#### **Summary:**

Low affinity neurotrophin receptor which can bind to mature NGF, BDNF, NTF3, and NTF4 (PubMed:11559852, PubMed:1317267). Forms a heterodimeric receptor with SORCS2 that binds the precursor forms of NGF (proNGF), BDNF (proBDNF) and NTF3 (proNT3) with high affinity, and has much lower affinity for mature NGF and BDNF (PubMed:22155786, PubMed:24908487, PubMed:27457814). Plays an important role in differentiation and survival of specific neuronal populations during development (PubMed:1317267, PubMed:11559852). Can mediate cell survival as well as cell death of neural cells (PubMed:1317267, PubMed:11559852, PubMed:24908487). The heterodimeric receptor formed with SORCS2 plays a role in proBDNF-dependent synaptic plasticity, in hippocampal long term depression (LTD) and long term potentiation (LTP) (PubMed:27457814). Plays a role in the inactivation of RHOA (By similarity). Plays a role in the regulation of the translocation of GLUT4 to the cell surface in adipocytes and skeletal muscle cells in response to insulin, probably by regulating RAB31 activity, and thereby contributes to the regulation of insulindependent glucose uptake (PubMed:22460790). Necessary for the circadian oscillation of the clock genes ARNTL/BMAL1, PER1, PER2 and NR1D1 in the suprachiasmatic nucleus (SCN) of the brain and in liver and of the genes involved in glucose and lipid metabolism in the liver (PubMed:23785138).[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).