

Product datasheet for **SR422281**

Hipk2 Mouse siRNA Oligo Duplex (Locus ID 15258)

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_001136065 , NM_001294143 , NM_001294144 , NM_010433
UniProt ID:	Q9QZR5
Synonyms:	1110014O20Rik; B230339E18Rik; Stank
Components:	Hipk2 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 15258) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



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Summary:

Serine/threonine-protein kinase involved in transcription regulation, p53/TP53-mediated cellular apoptosis and regulation of the cell cycle. Acts as a corepressor of several transcription factors, including SMAD1 and POU4F1/Brn3a and probably NK homeodomain transcription factors. Phosphorylates PDX1, ATF1, PML, p53/TP53, CREB1, CTBP1, CBX4, RUNX1, EP300, CTNNB1, HMGA1 and ZBTB4. Inhibits cell growth and promotes apoptosis through the activation of p53/TP53 both at the transcription level and at the protein level (by phosphorylation and indirect acetylation). The phosphorylation of p53/TP53 may be mediated by a p53/TP53-HIPK2-AXIN1 complex. Involved in the response to hypoxia by acting as a transcriptional co-suppressor of HIF1A. Mediates transcriptional activation of TP73. In response to TGF β , cooperates with DAXX to activate JNK. Negative regulator through phosphorylation and subsequent proteasomal degradation of CTNNB1 and the antiapoptotic factor CTBP1. In the Wnt/beta-catenin signaling pathway acts as an intermediate kinase between MAP3K7/TAK1 and NLK to promote the proteasomal degradation of MYB. Phosphorylates CBX4 upon DNA damage and promotes its E3 SUMO-protein ligase activity. Activates CREB1 and ATF1 transcription factors by phosphorylation in response to genotoxic stress. In response to DNA damage, stabilizes PML by phosphorylation. PML, HIPK2 and FBXO3 may act synergically to activate p53/TP53-dependent transactivation. Promotes angiogenesis, and is involved in erythroid differentiation, especially during fetal liver erythropoiesis. Phosphorylation of RUNX1 and EP300 stimulates EP300 transcription regulation activity. Triggers ZBTB4 protein degradation in response to DNA damage. Modulates HMGA1 DNA-binding affinity. In response to high glucose, triggers phosphorylation-mediated subnuclear localization shifting of PDX1. Involved in the regulation of eye size, lens formation and retinal lamination during late embryogenesis. [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).