

Product datasheet for SR419878

OriGene Technologies, Inc.

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Ikbkb Mouse siRNA Oligo Duplex (Locus ID 16150)

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 001159774</u>, <u>NM 010546</u>

UniProt ID: <u>088351</u>

Synonyms: Al132552; IKK-2; IKK-beta; IKK2; IKKbeta; IKK[b]

Components: Ikbkb (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 16150)

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

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

Summary: Serine kinase that plays an essential role in the NF-kappa-B signaling pathway which is

activated by multiple stimuli such as inflammatory cytokines, bacterial or viral products, DNA

damages or other cellular stresses. Acts as part of the canonical IKK complex in the

conventional pathway of NF-kappa-B activation and phosphorylates inhibitors of NF-kappa-B on 2 critical serine residues. These modifications allow polyubiquitination of the inhibitors and subsequent degradation by the proteasome. In turn, free NF-kappa-B is translocated into

the nucleus and activates the transcription of hundreds of genes involved in immune response, growth control, or protection against apoptosis. In addition to the NF-kappa-B inhibitors, phosphorylates several other components of the signaling pathway including NEMO/IKBKG, NF-kappa-B subunits RELA and NFKB1, as well as IKK-related kinases TBK1 and IKBKE. IKK-related kinase phosphorylations may prevent the overproduction of inflammatory mediators since they exert a negative regulation on canonical IKKs. Phosphorylates FOXO3, mediating the TNF-dependent inactivation of this pro-apoptotic transcription factor. Also phosphorylates other substrates including NCOA3, BCL10 and IRS1. Within the nucleus, acts as an adapter protein for NFKBIA degradation in UV-induced NF-kappa-B activation.

[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).