

Product datasheet for SR303696

OriGene Technologies, Inc.

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Calcineurin A (PPP3CA) Human siRNA Oligo Duplex (Locus ID 5530)

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 000944, NM 001130691, NM 001130692

UniProt ID: Q08209

Synonyms: ACCIID; CALN; CALNA; CALNA1; CCN1; CNA1; IECEE; IECEE1; PPP2B

Components: PPP3CA (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 5530)

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

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

Summary: Calcium-dependent, calmodulin-stimulated protein phosphatase which plays an essential

role in the transduction of intracellular Ca(2+)-mediated signals (PubMed:15671020,

PubMed:18838687, PubMed:19154138, PubMed:23468591). Many of the substrates contain a PxIxIT motif and/or a LxVP motif (PubMed:17498738, PubMed:17502104, PubMed:23468591,

PubMed:27974827, PubMed:22343722). In response to increased Ca(2+) levels,

dephosphorylates and activates phosphatase SSH1 which results in cofilin dephosphorylation

(PubMed:15671020). In response to increased Ca(2+) levels following mitochondrial depolarization, dephosphorylates DNM1L inducing DNM1L translocation to the

mitochondrion (PubMed:18838687). Dephosphorylates heat shock protein HSPB1 (By

similarity). Dephosphorylates and activates transcription factor NFATC1 (PubMed:19154138). In response to increased Ca(2+) levels, regulates NFAT-mediated transcription probably by

dephosphorylating NFAT and promoting its nuclear translocation (PubMed:26248042).

Dephosphorylates and inactivates transcription factor ELK1 (PubMed:19154138).

Dephosphorylates DARPP32 (PubMed:19154138). May dephosphorylate CRTC2 at 'Ser-171' resulting in CRTC2 dissociation from 14-3-3 proteins (PubMed:30611118).[UniProtKB/Swiss-

Prot Function]





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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).