

Product datasheet for **SR311643**

KIAA1543 (CAMSAP3) Human siRNA Oligo Duplex (Locus ID 57662)

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_001080429 , NM_020902
UniProt ID:	Q9P1Y5
Synonyms:	KIAA1543; NEZHA; PPP1R80
Components:	CAMSAP3 (Human) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 57662) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



[View online »](#)

Summary:

Key microtubule-organizing protein that specifically binds the minus-end of non-centrosomal microtubules and regulates their dynamics and organization (PubMed:19041755, PubMed:23169647). Specifically recognizes growing microtubule minus-ends and autonomously decorates and stabilizes microtubule lattice formed by microtubule minus-end polymerization (PubMed:24486153). Acts on free microtubule minus-ends that are not capped by microtubule-nucleating proteins or other factors and protects microtubule minus-ends from depolymerization (PubMed:24486153). In addition, it also reduces the velocity of microtubule polymerization (PubMed:24486153). Required for the biogenesis and the maintenance of zonula adherens by anchoring the minus-end of microtubules to zonula adherens and by recruiting the kinesin KIFC3 to those junctional sites (PubMed:19041755). Required for orienting the apical-to-basal polarity of microtubules in epithelial cells: acts by tethering non-centrosomal microtubules to the apical cortex, leading to their longitudinal orientation (PubMed:27802168, PubMed:26715742). Plays a key role in early embryos, which lack centrosomes: accumulates at the microtubule bridges that connect pairs of cells and enables the formation of a non-centrosomal microtubule-organizing center that directs intracellular transport in the early embryo (By similarity). Couples non-centrosomal microtubules with actin: interaction with MACF1 at the minus ends of non-centrosomal microtubules, tethers the microtubules to actin filaments, regulating focal adhesion size and cell migration (PubMed:27693509). Plays a key role in the generation of non-centrosomal microtubules by accumulating in the pericentrosomal region and cooperating with KATNA1 to release non-centrosomal microtubules from the centrosome (PubMed:28386021). Through the microtubule cytoskeleton, also regulates the organization of cellular organelles including the Golgi and the early endosomes (PubMed:28089391). Through interaction with AKAP9, involved in translocation of Golgi vesicles in epithelial cells, where microtubules are mainly non-centrosomal (PubMed:28089391).[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).