

Product datasheet for **TR518002**

Kif14 Mouse shRNA Plasmid (Locus ID 381293)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Kif14 Mouse shRNA Plasmid (Locus ID 381293)
Locus ID:	381293
Synonyms:	D1Ert367e; E130203M01
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Kif14 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 381293). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001081258 , NM_001287179 , NM_001081258.1 , NM_001287179.1 , NM_001287179.2 , BC054123 , BC158132
UniProt ID:	LON7N1
Summary:	Microtubule motor protein that binds to microtubules with high affinity through each tubulin heterodimer and has an ATPase activity (PubMed:24949858). Plays a role in many processes like cell division, cytokinesis and also in cell proliferation and apoptosis (By similarity). During cytokinesis, targets to central spindle and midbody through its interaction with PRC1 and CIT respectively (By similarity). Regulates cell growth through regulation of cell cycle progression and cytokinesis. During cell cycle progression acts through SCF-dependent proteasomal ubiquitin-dependent protein catabolic process which controls CDKN1B degradation, resulting in positive regulation of cyclins, including CCNE1, CCND1 and CCNB1 (By similarity). During late neurogenesis, regulates the cerebellar and cerebral cortex development and olfactory bulb development through regulation of apoptosis, cell proliferation and cell division (PubMed:23308235, PubMed:24931760). Also is required for chromosome congression and alignment during mitotic cell cycle process (By similarity). Regulates cell spreading, focal adhesion dynamics, and cell migration through its interaction with RADIL resulting in regulation of RAP1A-mediated inside-out integrin activation by tethering RADIL on microtubules (By similarity).[UniProtKB/Swiss-Prot Function]



[View online »](#)

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, 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 shRNA control (Western Blot data preferred).