

Product datasheet for **TR519680**

Cep290 Mouse shRNA Plasmid (Locus ID 216274)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Cep290 Mouse shRNA Plasmid (Locus ID 216274)
Locus ID:	216274
Synonyms:	b2b1454Clo; b2b1752Clo; BC004690; Nphp6
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cep290 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 216274). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC004690 , NM_146009 , NM_146009.1 , NM_146009.2 , BC004690.1 , NM_146009.3
UniProt ID:	Q6A078
Summary:	Involved in early and late steps in cilia formation (PubMed:21565611). Its association with CCP110 is required for inhibition of primary cilia formation by CCP110 (By similarity). May play a role in early ciliogenesis in the disappearance of centriolar satellites and in the transition of primary ciliary vesicles (PCVs) to capped ciliary vesicles (CCVs). Required for the centrosomal recruitment of RAB8A and for the targeting of centriole satellite proteins to centrosomes such as of PCM1 (By similarity). Required for the correct localization of ciliary and phototransduction proteins in retinal photoreceptor cells; may play a role in ciliary transport processes (PubMed:16632484). Required for efficient recruitment of RAB8A to primary cilium (By similarity). In the ciliary transition zone is part of the tectonic-like complex (also named B9 complex) which is required for tissue-specific ciliogenesis and may regulate ciliary membrane composition (PubMed:21725307). Involved in regulation of the BBSome complex integrity, specifically for presence of BBS2, BBS5 and BBS8/TTC8 in the complex, and in ciliary targeting of selected BBSome cargos. May play a role in controlling entry of the BBSome complex to cilia possibly implicating IQCB1/NPHP5 (By similarity). Activates ATF4-mediated transcription (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).