

## Product datasheet for TR313901

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## Capicua (CIC) Human shRNA Plasmid Kit (Locus ID 23152)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Capicua (CIC) Human shRNA Plasmid Kit (Locus ID 23152)

Locus ID: 23152 Synonyms: MRD45

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

CIC - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

23152). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001304815, NM 015125, NM 015125.1, NM 015125.2, NM 015125.3, NM 015125.4,

BC140443

UniProt ID: O96RK0

**Summary:** The protein encoded by this gene is an ortholog of the Drosophila melanogaster capicua

gene, and is a member of the high mobility group (HMG)-box superfamily of transcriptional repressors. This protein contains a conserved HMG domain that is involved in DNA binding and nuclear localization, and a conserved C-terminus. Studies suggest that the N-terminal region of this protein interacts with Atxn1 (GenelD:6310), to form a transcription repressor complex, and in vitro studies suggest that polyglutamine-expansion of ATXN1 may alter the repressor activity of this complex. Mutations in this gene have been associated with

repressor activity of this complex. Mutations in this gene have been associated with olidogdendrogliomas (PMID:21817013). In addition, translocation events resulting in gene fusions of this gene with both DUX4 (GeneID:100288687) and FOXO4 (GeneID:4303) have been associated with round cell sarcomas. There are multiple pseudogenes of this gene found

on chromosomes 1, 4, 6, 7, 16, 20, and the Y chromosome. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Feb 2015]

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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





## 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).