

Product datasheet for TR317191

OriGene Technologies, Inc.

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C19orf56 (WDR83OS) Human shRNA Plasmid Kit (Locus ID 51398)

Product data:

Product Type: shRNA Plasmids

Product Name: C19orf56 (WDR83OS) Human shRNA Plasmid Kit (Locus ID 51398)

Locus ID: 51398

Synonyms: ASTERIX; C19orf56; PTD008

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: WDR83OS - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID

= 51398). 5µg purified plasmid DNA per construct

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

RefSeq: NM 016145, NM 016145.1, NM 016145.2, NM 016145.3, BC042919, BC042919.1, BC001192,

BC061912, NM 016145.4

UniProt ID: Q9Y284

Summary: Component of the PAT complex, an endoplasmic reticulum (ER)-resident membrane

multiprotein complex that facilitates multi-pass membrane proteins insertion into

membranes (PubMed:32814900). The PAT complex acts as an intramembrane chaperone by directly interacting with nascent transmembrane domains (TMDs), releasing its substrates upon correct folding, and is needed for optimal biogenesis of multi-pass membrane proteins

(PubMed:32814900). WDR83OS/Asterix is the substrate-interacting subunit of the PAT complex, whereas CCDC47 is required to maintain the stability of WDR83OS/Asterix (PubMed:12475939, PubMed:32814900). WDR83OS/Asterix associates with the first

transmembrane domain (TMD1) of the nascent chain, independently of the N-glycosylation of the chain and irrespective of the amino acid sequence and transmembrane topology of TMD1 (PubMed:12475939, PubMed:32814900). The PAT complex favors the binding to TMDs with exposed hydrophilic amino acids within the lipid bilayer and provides a membrane-embedded partially hydrophilic environment in which TMD1 binds (PubMed:32814900).

[UniProtKB/Swiss-Prot Function]





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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).