

## Product datasheet for TR317674

## OriGene Technologies, Inc.

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## **ZCCHC3 Human shRNA Plasmid Kit (Locus ID 85364)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** ZCCHC3 Human shRNA Plasmid Kit (Locus ID 85364)

Locus ID: 85364

Synonyms: C20orf99

Vector: pRS (TR20003)

E. coli Selection: **Ampicillin** Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

ZCCHC3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

85364). 5µg purified plasmid DNA per construct

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

NM 033089, NM 033089.1, NM 033089.2, NM 033089.3, NM 033089.4, NM 033089.5, RefSeq:

NM 033089.6, BC069238, BC069238.1, BC020460, BC036469, BC107584, NM 033089.7

**UniProt ID:** Q9NUD5

**Summary:** Nucleic acid-binding protein involved in innate immune response to DNA and RNA viruses

(PubMed:30193849, PubMed:30135424). Binds DNA and RNA in the cytoplasm and acts by

promoting recognition of viral nucleic acids by virus sensors, such as DDX58/RIG-I, IFIH1/MDA5 and CGAS (PubMed:30193849, PubMed:30135424). Acts as a co-sensor for recognition of double-stranded DNA (dsDNA) by cGAS in the cytoplasm, thereby playing a role in innate immune response to cytosolic dsDNA and DNA virus (PubMed:30135424). Binds dsDNA and probably acts by promoting sensing of dsDNA by CGAS, leading to enhance CGAS oligomerization and activation (PubMed:30135424). Promotes sensing of viral RNA by RIG-I-

stranded RNA (dsRNA), enhancing the binding of DDX58/RIG-I and IFIH1/MDA5 to dsRNA and promotes 'Lys-63'-linked ubiquitination and subsequent activation of DDX58/RIG-I and

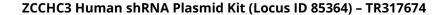
like receptors proteins DDX58/RIG-I and IFIH1/MDA5 via two mechanisms: binds double-

IFIH1/MDA5 (PubMed:30193849).[UniProtKB/Swiss-Prot Function]

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).