

## **Product datasheet for TR510821**

## 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com

OriGene Technologies, Inc.

https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **Tnfrsf21 Mouse shRNA Plasmid (Locus ID 94185)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Tnfrsf21 Mouse shRNA Plasmid (Locus ID 94185)

**Locus ID:** 94185

**Synonyms:** AA959878; DR6; R74815; TR7

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Furomycin

Format: Retroviral plasmids

Components: Tnfrsf21 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

94185). 5µg purified plasmid DNA per construct

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

RefSeq: <u>BC016420</u>, <u>NM 178589</u>, <u>NM 178589.1</u>, <u>NM 178589.2</u>, <u>NM 178589.3</u>

UniProt ID: Q9EPU5

**Summary:** Promotes apoptosis, possibly via a pathway that involves the activation of NF-kappa-B. Can

also promote apoptosis mediated by BAX and by the release of cytochrome c from the mitochondria into the cytoplasm. Plays a role in neuronal apoptosis, including apoptosis in response to amyloid peptides derived from APP, and is required for both normal cell body death and axonal pruning. Trophic-factor deprivation triggers the cleavage of surface APP by

beta-secretase to release sAPP-beta which is further cleaved to release an N-terminal fragment of APP (N-APP). N-APP binds TNFRSF21; this triggers caspase activation and degeneration of both neuronal cell bodies (via caspase-3) and axons (via caspase-6). Negatively regulates oligodendrocyte survival, maturation and myelination. Plays a role in signaling cascades triggered by stimulation of T-cell receptors, in the adaptive immune response and in the regulation of T-cell differentiation and proliferation. Negatively regulates T-cell responses and the release of cytokines such as IL4, IL5, IL10, IL13 and IFNG by Th2 cells.

Negatively regulates the production of IgG, IgM and IgM in response to antigens. May inhibit the activation of JNK in response to T-cell stimulation.[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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).