

## **Product datasheet for TL309830**

## 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

## **RGS7 Human shRNA Plasmid Kit (Locus ID 6000)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: RGS7 Human shRNA Plasmid Kit (Locus ID 6000)

Locus ID: 6000

**Vector:** pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

**Components:** RGS7 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 6000).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001282773, NM 001282775, NM 001282778, NM 002924, NM 001350113,

NM 001350114, NM 001350115, NM 001350116, NM 002924.1, NM 002924.2, NM 002924.3,

NM 002924.4, NM 002924.5, NM 002924.6, NM 001282773.1, NM 001282773.2, NM 001282778.1, NM 001282778.2, NM 001282775.1, NM 001282775.2, BC022009,

BC022009.1, NM 001364886

UniProt ID: P49802

**Summary:** Regulates G protein-coupled receptor signaling cascades. Inhibits signal transduction by

increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound form (PubMed:10521509, PubMed:10862767). The RGS7/GNB5 dimer enhances GNAO1 GTPase activity (PubMed:10521509). May play a role in synaptic vesicle exocytosis (PubMed:12659861). Modulates the activity of potassium channels that are activated by GNAO1 in response to muscarinic acetylcholine receptor M2/CHRM2 signaling

(PubMed:15897264).[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 <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).