

## **Product datasheet for TG316565**

## OriGene Technologies, Inc.

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## G protein coupled receptor 30 (GPER1) Human shRNA Plasmid Kit (Locus ID 2852)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** G protein coupled receptor 30 (GPER1) Human shRNA Plasmid Kit (Locus ID 2852)

**Locus ID:** 2852

Synonyms: FEG-1, LERGU, CMKRL2, LERGU2, GPCR-Br, MGC99678

**Vector:** pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

**Components:** GPER1 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 2852).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 001031682, NM 001039966, NM 001098201, NM 001505, NM 001039966.1,

NM 001098201.1, NM 001505.1, NM 001505.2, BC011634, BC011634.1, BC067849, BC082766,

BM672716, NM 001505.3, NM 001098201.3

UniProt ID: Q99527

**Summary:** This gene encodes a multi-pass membrane protein that localizes to the endoplasmic

reticulum and a member of the G-protein coupled receptor 1 family. This receptor binds estrogen and activates multiple downstream signaling pathways, leading to stimulation of adenylate cyclase and an increase in cyclic AMP levels, while also promoting intracellular calcium mobilization and synthesis of phosphatidylinositol 3,4,5-trisphosphate in the nucleus. This protein therefore plays a role in the rapid nongenomic signaling events widely observed following stimulation of cells and tissues with estrogen. This receptor has been shown to play a role in diverse biological processes, including bone and nervous system development,

metabolism, cognition, male fertility and uterine function. [provided by RefSeq, Aug 2017]

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).