

## **Product datasheet for TL703763**

## Ffar4 Rat shRNA Plasmid (Locus ID 294075)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Ffar4 Rat shRNA Plasmid (Locus ID 294075)

**Locus ID:** 294075

**Synonyms:** Gpr120; O3far1

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

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Ffar4 - Rat, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 294075). 5µg

purified plasmid DNA per construct

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

RefSeq: <u>NM 001047088, NM 001047088.1</u>

UniProt ID: Q2AC31

Summary: Receptor for medium and long-chain free fatty acids (FFAs). Signals via a G(q)/G(11)-coupled

pathway. Acts as a receptor for omega-3 fatty acids and mediates robust anti-inflammatory effects, particularly in macrophages and fat cells. The anti-inflammatory effects involve

inhibition of TAK1 through a beta-arrestin 2 (ARRB2)/TAB1-dependent effect, but independent of the G(g)/G(11)-coupled pathway. Mediates potent insulin sensitizing and antidiabetic

of the G(q)/G(11)-coupled pathway. Mediates potent insulin sensitizing and antidiabetic effects by repressing macrophage-induced tissue inflammation. May mediate the taste of fatty acids. Mediates FFA-induced inhibition of apoptosis in enteroendocrine cells. May play a

role in the regulation of adipocyte development and differentiation (By similarity).

[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>.



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## 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).