

## Product datasheet for RC223772L4V

## OriGene Technologies, Inc.

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## **GPR149 (NM\_001038705) Human Tagged ORF Clone Lentiviral Particle**

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: GPR149 (NM 001038705) Human Tagged ORF Clone Lentiviral Particle

Symbol: GPR149

Synonyms: IEDA; PGR10; R35

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001038705

ORF Size: 2193 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC223772).

Sequence:

OTI Disclaimer:

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 001038705.1

 RefSeq Size:
 2323 bp

 RefSeq ORF:
 2196 bp

 Locus ID:
 344758

 UniProt ID:
 Q86SP6

 Cytogenetics:
 3q25.2

**Protein Families:** Druggable Genome, GPCR, Transmembrane

MW: 80.8 kDa





## **Gene Summary:**

This gene encodes a seven-transmembrane G protein coupled receptor (GPCR) class A family member. Although categorized as a class A GPCR, the encoded protein lacks the first two charged amino acids of the highly conserved Asp-Arg-Tyr (DRY) motif found in the third transmembrane helix of class A receptors which is important for efficient G protein-coupled signal transduction. Mice with a knockout of the orthologous gene are viable and have normal maturation of the ovarian follicle, but show enhanced fertility and ovulation. All GPCRs have a common structural architecture consisting of seven transmembrane alphahelices interconnected by three extracellular and three intracellular loops. A general feature of GPCR signaling is agonist-induced conformational changes in the receptor, leading to activation of the heterotrimeric G proteins, which consist of the guanine nucleotide-binding G-alpha subunit and the dimeric G-beta-gamma subunits. The activated G proteins then bind to and activate numerous downstream effector proteins, which generate second messengers that mediate a broad range of cellular and physiological processes. [provided by RefSeq, Jul 2017]