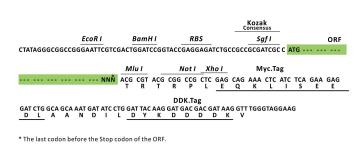


# Product datasheet for MR227239L3

## Gper1 (NM\_029771) Mouse Tagged Lenti ORF Clone

### **Product data:**

#### **Product Type: Expression Plasmids Product Name:** Gper1 (NM 029771) Mouse Tagged Lenti ORF Clone Tag: Myc-DDK Symbol: Gper1 6330420K13Rik; Ceprl; CMKRL2; FEG-1; GPCR-Br; Gper; Gpr30 Synonyms: Mammalian Cell Puromycin Selection: Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092) E. coli Selection: Chloramphenicol (34 ug/mL) The ORF insert of this clone is exactly the same as(MR227239). **ORF** Nucleotide Sequence: **Restriction Sites:** Sgfl-Mlul **Cloning Scheme:** Cloning sites used for ORF Shuttling: ORF Sqf I Mlu I



--- GCG ATC GC C ATG --- //--- NNN ACG CGT ---

ACCN: ORF Size: NM\_029771 1125 bp

#### OriGene Technologies, Inc.

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	1 (NM_029771) Mouse Tagged Lenti ORF Clone – MR227239L3
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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
RefSeq:	<u>NM 029771.3</u> , <u>NP 084047.2</u>
RefSeq Size:	2525 bp
RefSeq ORF:	1128 bp
Locus ID:	76854
UniProt ID:	Q8BMP4
Cytogenetics:	5 G2

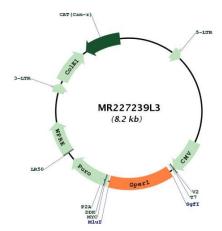
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### ORIGENE Gper1 (NM\_029771) Mouse Tagged Lenti ORF Clone – MR227239L3

#### Gene Summary:

G-protein coupled estrogen receptor that binds to 17-beta-estradiol (E2) with high affinity, leading to rapid and transient activation of numerous intracellular signaling pathways. Stimulates cAMP production, calcium mobilization and tyrosine kinase Src inducing the release of heparin-bound epidermal growth factor (HB-EGF) and subsequent transactivation of the epidermal growth factor receptor (EGFR), activating downstream signaling pathways such as PI3K/Akt and ERK/MAPK. Mediates pleiotropic functions among others in the cardiovascular, endocrine, reproductive, immune and central nervous systems. Has a role in cardioprotection by reducing cardiac hypertrophy and perivascular fibrosis in a RAMP3dependent manner. Regulates arterial blood pressure by stimulating vasodilation and reducing vascular smooth muscle and microvascular endothelial cell proliferation. Plays a role in blood glucose homeostasis contributing to the insulin secretion response by pancreatic beta cells. Triggers mitochondrial apoptosis during pachytene spermatocyte differentiation. Stimulates uterine epithelial cell proliferation. Enhances uterine contractility in response to oxytocin. Contributes to thymic atrophy by inducing apoptosis. Attenuates TNF-mediated endothelial expression of leukocyte adhesion molecules. Promotes neuritogenesis in developing hippocampal neurons. Plays a role in acute neuroprotection against NMDAinduced excitotoxic neuronal death. Increases firing activity and intracellular calcium oscillations in luteinizing hormone-releasing hormone (LHRH) neurons. Inhibits early osteoblast proliferation at growth plate during skeletal development. Inhibits mature adipocyte differentiation and lipid accumulation. Involved in the recruitment of beta-arrestin 2 ARRB2 at the plasma membrane in epithelial cells. Functions also as a receptor for aldosterone mediating rapid regulation of vascular contractibility through the PI3K/ERK signaling pathway. Involved in cancer progression regulation. Stimulates cancer-associated fibroblast (CAF) proliferation by a rapid genomic response through the EGFR/ERK transduction pathway. Associated with EGFR, may act as a transcription factor activating growth regulatory genes (c-fos, cyclin D1). Promotes integrin alpha-5/beta-1 and fibronectin (FN) matrix assembly in breast cancer cells.[UniProtKB/Swiss-Prot Function]

### **Product images:**



Circular map for MR227239L3

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