

### **Product datasheet for RC214449L3**

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OriGene Technologies, Inc.

## GRID2 (NM\_001510) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** GRID2 (NM\_001510) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: GRID2

Synonyms: GluD2; SCAR18

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC214449).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_001510

ORF Size: 3021 bp





#### GRID2 (NM\_001510) Human Tagged Lenti ORF Clone - RC214449L3

**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.

**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:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

**RefSeq:** <u>NM 001510.2</u>

 RefSeq Size:
 3024 bp

 RefSeq ORF:
 3024 bp

 Locus ID:
 2895

 UniProt ID:
 043424

Cytogenetics: 4q22.1-q22.2

**Protein Families:** Druggable Genome, Ion Channels: Glutamate Receptors, Transmembrane

**Protein Pathways:** Long-term depression, Neuroactive ligand-receptor interaction

**MW:** 113.2 kDa

**Gene Summary:** The protein encoded by this gene is a member of the family of ionotropic glutamate receptors

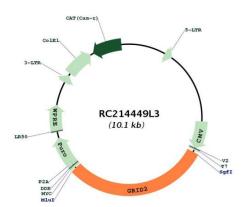
which are the predominant excitatory neurotransmitter receptors in the mammalian brain. The encoded protein is a multi-pass membrane protein that is expressed selectively in cerebellar Purkinje cells. A point mutation in the mouse ortholog, associated with the phenotype named 'lurcher', in the heterozygous state leads to ataxia resulting from selective,

cell-autonomous apoptosis of cerebellar Purkinje cells during postnatal development. Mice homozygous for this mutation die shortly after birth from massive loss of mid- and hindbrain neurons during late embryogenesis. This protein also plays a role in synapse organization between parallel fibers and Purkinje cells. Alternate splicing results in multiple transcript variants encoding distinct isoforms. Mutations in this gene cause cerebellar ataxia in humans.

[provided by RefSeq, Apr 2014]



# **Product images:**



Circular map for RC214449L3