

Product datasheet for RC230092L4

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GCAT (NM_001171690) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: GCAT (NM_001171690) Human Tagged Lenti ORF Clone

Tag: mGFP
Symbol: GCAT

Synonyms: KBL

Mammalian Cell

Selection:

Puromycin

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

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

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC230092).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

ACCN: NM_001171690

ORF Size: 1335 bp





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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.

RefSeq: <u>NM 001171690.1</u>, <u>NP 001165161.1</u>

 RefSeq ORF:
 1338 bp

 Locus ID:
 23464

 UniProt ID:
 075600

 Cytogenetics:
 22q13.1

Protein Pathways: Glycine, serine and threonine metabolism

MW: 48.4 kDa

Gene Summary: The degradation of L-threonine to glycine consists of a two-step biochemical pathway

involving the enzymes L-threonine dehydrogenase and 2-amino-3-ketobutyrate coenzyme A

ligase. L-Threonine is first converted into 2-amino-3-ketobutyrate by L-threonine

dehydrogenase. This gene encodes the second enzyme in this pathway, which then catalyzes the reaction between 2-amino-3-ketobutyrate and coenzyme A to form glycine and acetyl-

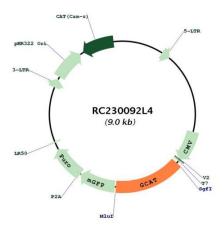
CoA. The encoded enzyme is considered a class II pyridoxal-phosphate-dependent

aminotransferase. Alternate splicing results in multiple transcript variants. A pseudogene of

this gene is found on chromosome 14. [provided by RefSeq, Jan 2010]



Product images:



Circular map for RC230092L4