

Product datasheet for **RC204870L4V**

GCAT (NM_014291) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	GCAT (NM_014291) Human Tagged ORF Clone Lentiviral Particle
Symbol:	GCAT
Synonyms:	KBL
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_014291
ORF Size:	1257 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC204870).
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.
RefSeq:	NM_014291.2
RefSeq Size:	1504 bp
RefSeq ORF:	1260 bp
Locus ID:	23464
UniProt ID:	O75600
Cytogenetics:	22q13.1
Domains:	aminotran_1_2
Protein Pathways:	Glycine, serine and threonine metabolism



[View online »](#)

MW: 45.3 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]