

## Product datasheet for **RC210763L2V**

### Catalase (CAT) (NM\_001752) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Catalase (CAT) (NM_001752) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Catalase
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_001752
ORF Size:	1581 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210763).
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. <a href="#">More info</a>
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:	<a href="#">NM_001752.2</a>
RefSeq Size:	2300 bp
RefSeq ORF:	1584 bp
Locus ID:	847
UniProt ID:	<a href="#">P04040</a>
Cytogenetics:	11p13
Domains:	catalase
Protein Families:	Druggable Genome



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<b>Protein Pathways:</b>	Amyotrophic lateral sclerosis (ALS), Metabolic pathways, Methane metabolism, Tryptophan metabolism
<b>MW:</b>	59.8 kDa
<b>Gene Summary:</b>	This gene encodes catalase, a key antioxidant enzyme in the bodies defense against oxidative stress. Catalase is a heme enzyme that is present in the peroxisome of nearly all aerobic cells. Catalase converts the reactive oxygen species hydrogen peroxide to water and oxygen and thereby mitigates the toxic effects of hydrogen peroxide. Oxidative stress is hypothesized to play a role in the development of many chronic or late-onset diseases such as diabetes, asthma, Alzheimer's disease, systemic lupus erythematosus, rheumatoid arthritis, and cancers. Polymorphisms in this gene have been associated with decreases in catalase activity but, to date, acatalasemia is the only disease known to be caused by this gene. [provided by RefSeq, Oct 2009]