

## Product datasheet for RC210763L1V

## OriGene Technologies, Inc.

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## 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-Myc-DDK (PS100064)

Tag: Myc-DDK

**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. 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:** <u>NM 001752.2</u>

RefSeq Size: 2300 bp
RefSeq ORF: 1584 bp
Locus ID: 847

UniProt ID: P04040

Cytogenetics: 11p13

Domains: catalase

**Protein Families:** Druggable Genome





## Catalase (CAT) (NM\_001752) Human Tagged ORF Clone Lentiviral Particle - RC210763L1V

**Protein Pathways:** Amyotrophic lateral sclerosis (ALS), Metabolic pathways, Methane metabolism, Tryptophan

metabolism

**MW:** 59.8 kDa

**Gene Summary:** 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]