

## Product datasheet for RC210055L4V

## OriGene Technologies, Inc.

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## EXOSC10 (NM\_001001998) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** EXOSC10 (NM\_001001998) Human Tagged ORF Clone Lentiviral Particle

Symbol: EXOSC10

Synonyms: p2; p3; p4; PM-Scl; PM/Scl-100; PMSCL; PMSCL2; RRP6; Rrp6p

Mammalian Cell

Selection:

Puromycin

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

Tag: mGFP

**ACCN:** NM\_001001998

ORF Size: 2655 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC210055).

Sequence:

**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

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.

**RefSeg:** NM 001001998.1

 RefSeq Size:
 2834 bp

 RefSeq ORF:
 2658 bp

 Locus ID:
 5394

 UniProt ID:
 Q01780

Cytogenetics: 1p36.22

**Protein Pathways:** RNA degradation

MW: 100.8 kDa







## **Gene Summary:**

Putative catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, in the elimination of RNA processing by-products and non-coding 'pervasive' transcripts, such as antisense RNA species and promoterupstream transcripts (PROMPTs), and of mRNAs with processing defects, thereby limiting or excluding their export to the cytoplasm. The RNA exosome may be involved in Ig class switch recombination (CSR) and/or Ig variable region somatic hypermutation (SHM) by targeting AICDA deamination activity to transcribed dsDNA substrates. In the cytoplasm, the RNA exosome complex is involved in general mRNA turnover and specifically degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3' untranslated regions, and in RNA surveillance pathways, preventing translation of aberrant mRNAs. It seems to be involved in degradation of histone mRNA. EXOSC10 has 3'-5' exonuclease activity (By similarity). EXOSC10 is required for nucleolar localization of C1D and probably mediates the association of MTREX, C1D and MPP6 wth the RNA exosome involved in the maturation of 5.8S rRNA.[UniProtKB/Swiss-Prot Function]