

Product datasheet for RC210055L3

OriGene Technologies, Inc.

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EXOSC10 (NM_001001998) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: EXOSC10 (NM_001001998) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: EXOSC10

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

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

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

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_001001998

ORF Size: 2655 bp





EXOSC10 (NM_001001998) Human Tagged Lenti ORF Clone - RC210055L3

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 001001998.1</u>

 RefSeq Size:
 2834 bp

 RefSeq ORF:
 2658 bp

 Locus ID:
 5394

 UniProt ID:
 001780

Cytogenetics: 1p36.22

Protein Pathways: RNA degradation

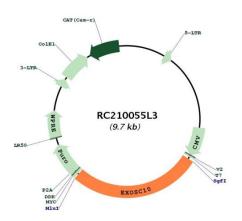
MW: 100.8 kDa



Gene Summary:

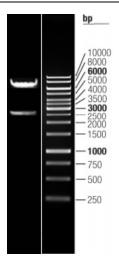
Putative catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, 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]

Product images:



Circular map for RC210055L3





Double digestion of RC210055L3 using Sgfl and Mlul $\,$