

Product datasheet for **SC118513**

EXOSC10 (NM_002685) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EXOSC10 (NM_002685) Human Untagged Clone
Tag:	Tag Free
Symbol:	EXOSC10
Synonyms:	p2; p3; p4; PM-Scl; PM/Scl-100; PMSCL; PMSCL2; RRP6; Rrp6p
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC118513 sequence for NM_002685 edited (data generated by NextGen Sequencing)

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ATGGCGCCACCCAGTACCCGGGAGCCCAGGGTCTGTGCGGACCCAGCGCAACCAATCC
GACGGAGAGATGGTGCTGCCAGGCTTCCCGGACCGGACAGCTTTGTGAAGTTTGCTCTT
GGGTCCGTGGTGGCAGTACCAAGGCATCTGGGGCCTACCACAGTTTGGCGATGAGTAT
GATTTTTACCGAAGTTTTCTGGCTTCCAAGCATTTTGCAGAAACACAGGGAGACAGGTTG
CTTCAGTGCATGAGCAGAGTAATGCAGTACCATGGGTGTCGACGCAACATTAAGGATCGA
AGTAAAGTGACTGAGCTGGAAGACAAGTTTGATTTACTAGTTGATGCCAATGATGTAATT
CTGGAGAGAGTGGGTATTTTACTGGATGAAGCCTCAGGTGTAAACAAGAATCAACAGCCT
GTCCTCCCTGCCGGCTTGCAGGTCACAAAACGGTAGTGTCCAGCTGGAACCGTAAGGCA
GCAGAATATGGCAAAAAAGCAAAATCTGAAACTTCCGGCTGCTTCATGCAAAAAATATC
ATCCGACCTCAGCTCAAGTTTCGAGAGAAGATTGACAATCCAACACACCATTTCTTCTCT
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CGGGAACGCCACAGGATCGTCTGAGGACTTGGACGTCCCCCTGCACTGGCTGATTTT
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TAG

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Clone variation with respect to NM_002685.2
 1389 g=>c;2083 a=>n;2094 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002685 unedited
 GTAATACGACTCACTTATAGGGCGGCCGATTCCGGCACGAGGTGAAAAATGGCGCCACC
 CAGTACCCGGGAGCCAGGGTCTGTCCGGCACCAGCGCAACCAATCCGACGGAGAGAT
 GGTGCTGCCAGGCTTCCCGGACGCCGACAGCTTTGTGAAGTTTGTCTTTGGGTCCGTGGT
 GGCAGTCACCAAGGCATCTGGGGCCTACCACAGTTTGGCGATGAGTATGATTTTTACC
 AAGTTTTCTGGCTTCCAAGCATTTTGCAGAACACAGGGAGACAGTTGCTTCAGTGCAT
 GAGCAGAGTAATGCAGTACCATGGGTGTCGCAGCAACATTAAGGATCGAAGTAAAGTGAC
 TGAGCTGGAAGACAAGTTTGATTTACTAGTTGATGCCAATGATTAATTCTGGAGAGAGT
 GGGTATTTTACTGGATGAAGCCTCAGGTGTAAACAAGAATCAACAGCCTGTCTCCCTGC
 CGGCTTGCAGGTCCCAAAACGGTAGTGTCCAGCTGGAACCGTAAGGCAGCAGAATATGG
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 GCTCAAGTTTTCGAGAGAAGATTGACAATCCAACACACCATTTCTTCTAAAATCTTCAT
 CAAACCAATGCTCAGAAACCTCCTCCTCAAGCTCTCTAAGGAAGCGGGAACGCCCA
 CAGGATCGTCTGAGACTTGGACGTCCCCCTGCACTGGCTGATTCATCCATCAGCAGA
 GAACCCAGCANGTTGAGCAAGAACATGTTGCACATNCCTATCAATATGAAGTANATCACC
 TTTACCCAGCAGATGCAGTGTCAAAAGCCACACCCNAGTATACAGACTATAGAAGA
 GACACATGCCATTTCTNATCCTNCTGGATGGACTCGTGGGACTCACC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002685 unedited
 CCGCGCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
 TCTTCAGAAAAATTTTAAATGGTTTAAAAATATGTTTGTACAAAAGCAGCACCAGCTTTT
 GGGGCTTCCGGTCCACAGCGCCACGTGTTTTCCAGGACTATTTTGGGGCCAGTTGTAC
 CTGAAGCCTTTGTCTGACTTTCCAGTTGAAAGGACATGCTTTTGTTCACCCGACTGT
 TTAATTTTTTTGGCTGCAATGCATTTTTTGCCAAACGGGGTCTGTTTATTTGGATCAAAC
 TGAAAAAAACTTTGGATTTGCTGTTTCCAGCAAAAGCCTTGAAGTCTGACTGGCTGTAG
 TCGTAAGGCGTAAACTCTTTTTCTGGGGCTCTGGGTCTTTGGCTTCTTGGAAATTTG
 AGTCGTTTCTTCTTGTCTGTTCTGGGGCCCTTGGGTCGCTTGTGCTCGCTCTCTC
 TTCTTTGACGATTTTCTAACACGACCTGCTGTCCGACGGAATGGCCTGTTCTGCTGCA
 GCTTTGACGCTCCTTTGCTGTTTCCCGGGCAGCTGTTTGTCAACTGCCTTCTCTTG
 ACAGCTTCTTTAGAGCCTTTTTGCTGTTTCCCGGGCAGCTGTTTGTCAACTGCCTTCTCTG
 TCATAAAATTTGGTGGATGGATCCAACCTTCTGCCTGAAAACGGAAGCCGGTGGCCCA
 ATGAGGGCAAAAACCTCCTTAAAGGGTTTTTAAAGGACCCATGATGTTCTCGGTTTTT
 TTTCCGGCACCTGAAAGGGACCCTTTTACTGTTTTAACTTAGGCCATTAAAAAAC
 GGAAGACCAGCGGGCAATAGAGCTGGGGGCCCAACCAGTTATTTCTTTTAAACGGAA
 AAGTCCCTTCTT

Restriction Sites:

NotI-NotI

ACCN:

NM_002685

Insert Size:

2880 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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:	<ol style="list-style-type: none">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:	NM_002685.2 , NP_002676.1
RefSeq Size:	2759 bp
RefSeq ORF:	2583 bp
Locus ID:	5394
UniProt ID:	Q01780
Cytogenetics:	1p36.22
Domains:	HRDC, 3_5_exonuclease
Protein Pathways:	RNA degradation
Gene Summary:	<p>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 promoter-upstream 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 with the RNA exosome involved in the maturation of 5.8S rRNA.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.</p>