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Product datasheet for MR211065

Exosc10 (NM_016699) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Exosc10 (NM_016699) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Exosc10
Synonyms:	p2; p3; p4; PM-Scl; PM/Scl-100; Pmscl2; RRP6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>MR211065 representing NM_016699
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCCTCCCAGTCCCCGGGAGCATCAGTCCGCGCCGGCGACCAGTGCGACCAAGCCTGACGCGGAGA
TGGTACTGCCTGGCTTCCCCGATGCAGACAGCTTCGTAAAGTTTGCACTTGGGTCGGTAGTGGCAGTTAC
CAAGGCATCCGGGGGCCTGCCACAGTTCGGTGACGAGTATGATTTTTACAGAAGTTTCCCTGCCTTCCAG
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A

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211065 representing NM_016699
Red=Cloning site Green=Tags(s)

MAPPSPREHQSAPATSATKPDAEMVLPGFPDADSFVKFALGSVVAVTKASGGLPQFGDEYDFYRSFPAFQ
AFCETQGDRLLQCMSRVMQYHGCRSNIKDRSKVTELEDKFDLLVDTNDVILERVGMLLDEASGVNKHQQP
VLPAGLQVPKTIVSSWNRKAGEYGKKAKSETFRLLHAKNIVRPQLRFREKIDNSNTPFLPKIFVKPNARK
PLPLALSKERRERPQDRPEDLDVPPALADFIHQQRTQQVEQDMFAHPYQYELDHFTPPQSVLQRPKPQLY
RAVGETPCHLVSSLDELVELNEKLLGCQEFAVDLEHHSYRSFLGLTCLMQISTRTEDFIVDTLELRSDMY
ILNESLTDPAIVKVFHGADSDIEWLQKDFGLYVVNMFDTHQAARLLNLARHSLDHLLRLYCGVESNKQYQ
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LVRQQINEMHLLIQQAREMPLLKSENAAGVRKSGPLPSAERLENDLFGPHDCSHAPPDNYQNTSTDGTLP
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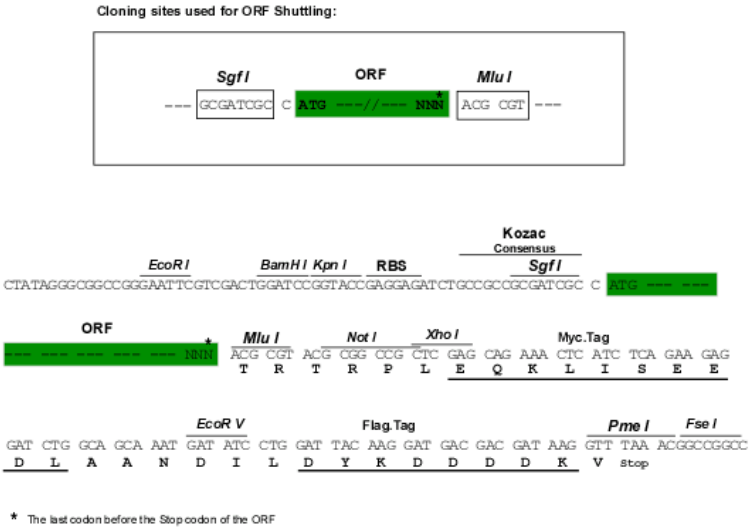
HKAHISQAAKFDPSSKIYEISNRWKLASQVQVQKEPKEATKKKVAEQTAAREEAKEEAAAGVLEQAIPVR
QQAALENATKKRERATSDLRTIEQKQEKKRLKSSKKAKDPDPPGKDFSPYDYSQSDFRAFAGDSKSKPSS
QFDPNKLAPSGKKGVGAKKCKQSVGNKSMSFAVGKSDRGFRHNWPKR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9048_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

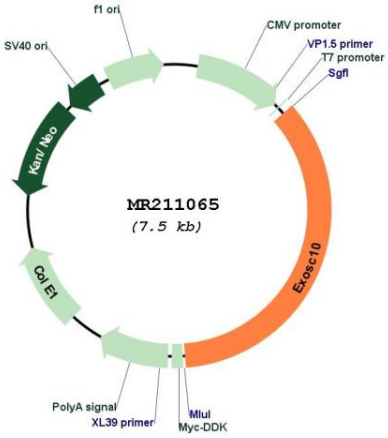


ACCN: NM_016699

ORF Size:	2661 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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:	NM_016699.3
RefSeq Size:	2803 bp
RefSeq ORF:	2664 bp
Locus ID:	50912
UniProt ID:	P56960
Cytogenetics:	4 E2
MW:	101.4 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 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 wth the RNA exosome involved in the maturation of 5.8S rRNA (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211065