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Product datasheet for MR217683

Exosc9 (NM_019393) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Exosc9 (NM_019393) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Exosc9
Synonyms:	p5; p6; PM/Scl-75; Pmscl1; RRP45
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR217683 representing NM_019393
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGAGACGCCGCTTTCCAACTGTGAGCGCCGCTTCCTGCTCCGCGCAATTGAGGAGAAGAAGCGCC
TGGACGGCAGACAGACCTATGATTACAGGAACATCAGGATCTCATTCGGAACGGATTATGGATGCTGTAT
TGTGGAACTGGGAAAAACAAGAGTCCTTGGACAGGTTTCCTGTGAACTTGTTTCTCCGAAACTCAATAGG
GCAACGGAAGGTATCCTCTTTTTTAACCTTGAGCTTTCTCAGATGGCTGCTCCAGCTTTTGAGCCTGGCA
GGCAGTCAGATCTCTTGGTGAAGCTGAATCGACTCTTAGAAAGGTGTCTACGAAATTCAAAGTGTATAGA
CACTGAATCTCTCTGTGTTGTCGCTGGTGAAAAGGTTTGGCAGATCCGTGTAGACCTACATTTATTAAAT
CATGATGGGAATATTATTGATGCTGCTAGCATTGCTGCAATTGTAGCCTTGTGTCACTTCCGAAGACCTG
ATGTCTCTGTCCAAGGAGAGGAAGTAACACTGTATACCCCTGAAGAGCGTGATCCCGTGCCATTGAGCAT
CCACCATATGCCCATTTGTGTCAGTTTTGCTTTCTTTCAGCAAGGAACATACTTATTGGTGGACCCCAAT
GAACGTGAAGAACGAGTAATGGATGGCTTGCTGGTGATTGCCATGAATAAGCATCGAGAAATTTGTACTA
TTCAGTCTAGTGGTGGGATAATGCTGCTTAAAGACCAGGTTTTCAGATGCAGTAAAATAGCTGGTGTGAA
AGTAGCAGAAATCACAGAGCTAATACAGAAAGCTTTGGAAAATGACCAGAGAGTCAGGAAAGAAGGTGGA
AAATTTGGCTTTGCAGAGTCTATAGCAAACCAAAGAATCACAGCGTTTAAAATGGAGACGGCCCCTATTG
ATACCTCCAACATAGAGGAGAGAGCAGAAGAAATTATTGCTGAAGCTGAACCTCCCCCAGAAGTTGTTTC
TCAACCTGTGCTGTGGACTCCTGGAACTGCCCAGATTGGAGACGGAATAGAAAACTCCTGGGGTGACCTT
GAAGATTCTGAGAAGGAAGAGGAAGAGGAGGAAGGTGGCATTGATGAAGCTGTCATTCTTGATGATACAA
AGATGGACACTGGAGAAGTTTCTGATATTGGGAGTCAAGGTGCCCCTATAGTGCTATCAGATAGTGAAGA
AGAAGAAATGATTATTTTGGAGCCAGAGAAGAACCCAAAGAAAATAAGAGCTCAGACCAGTGCAAACCAG
AAGGCACCAAGTAAAGGCCAAGGGAAAAGGAAGAAGAAGAAGAGAACTGCTAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR217683 representing NM_019393
Red=Cloning site Green=Tags(s)

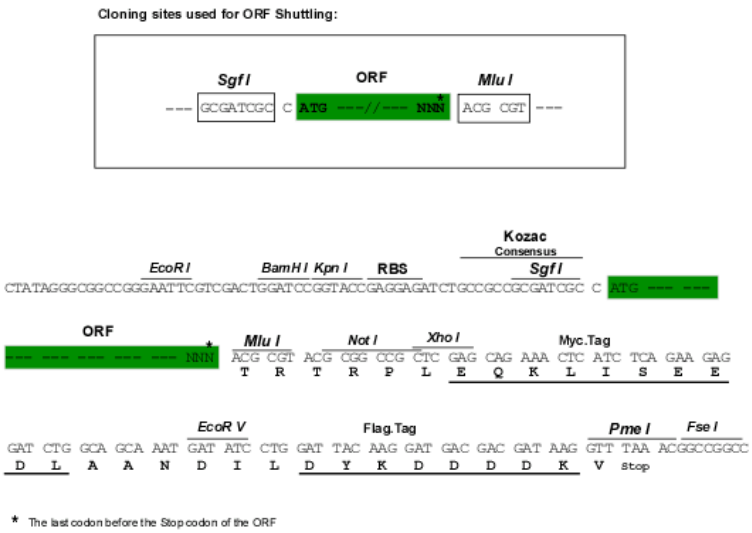
MKETPLSNCERRFLLRAIEEKKRLDGRQTYDYRNIRISFGTDYGCCIVELGKTRVLGQVSCELVSPKLNR
ATEGILFFNLELSQMAAPAFEPGRQSDLLVKLNRLLERCLRNSKCIDTESLCVVAGEKVWQIRVDLHLLN
HDGNIIDAASIAAIVALCHFRRPDVSVQGEEVTLYTPEERDPVPLSIHHMPICVSFAFFQQGTYLLVDPN
EREERVMDGLLVIAMNKHREICTIQSSGGIMLLKDQVFRCSKIAGVKVAEITELIQKALENDQRVRKEGG
KFGFAESIANQRITAFKMETAPIDTSNIEERAEEIIAEAEPPPEVVSQPVLWTPGTAQIGDGIENSWGDL
EDSEKEEEEEEGGIDEAVILDDTKMDTGEVSDIGSQGAPIVLSDSEEEEMIILEPEKNPKKIRAQTSANQ
KAPSKGQGKRKKKKRTAN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9044_f01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_019393

ORF Size: 1314 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.

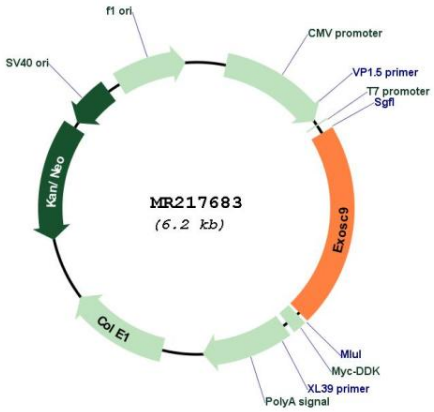
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_019393.2, NP_062266.1

RefSeq Size:	1622 bp
RefSeq ORF:	1317 bp
Locus ID:	50911
UniProt ID:	Q9JHI7
Cytogenetics:	3 B
MW:	49.4 kDa
Gene Summary:	Non-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. The catalytic inactive RNA exosome core complex of 9 subunits (Exo-9) is proposed to play a pivotal role in the binding and presentation of RNA for ribonucleolysis, and to serve as a scaffold for the association with catalytic subunits and accessory proteins or complexes. EXOSC9 binds to ARE-containing RNAs (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR217683