

Product datasheet for MR203681

Exosc3 (NM_025513) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Exosc3 (NM_025513) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Exosc3

Synonyms: 2310005D06Rik; AI593501; Rrp40

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >MR203681 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACACATGACAACAGAGCAAAGAAAACAGATCTTTGCCAGACTGGCAGAGAGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR203681 protein sequence

Red=Cloning site Green=Tags(s)

MAEVLSAGPESVAGCRARAVHKVLNQVVLPGEELVLPDHEDVDGLGGAGEQPLRLNAGARPRLRVVCGPG LRRCGDRLLVTKCGRLRHKEPSGGGGGVYWVDSQQKRYVPVKGDHVIGIVIAKSGDIFKVDVGGSEPASL SYLAFEGATKRNRPNVQVGDLIYGQCVVANKDMEPEMVCIDSCGRANGMGVIGQDGLLFKVTLGLIRKLL APDCEIVQELGKLYPLEIVFGMNGRIWVKAKTIQQTLILANVLEACEHMTTEQRKQIFARLAES

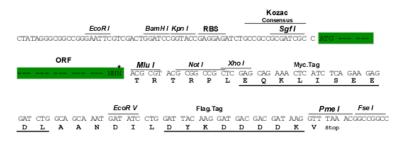
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_025513

ORF Size: 825 bp

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: NM 025513.1, NM 025513.2, NM 025513.3, NP 079789.1

RefSeq Size: 1035 bp
RefSeq ORF: 825 bp
Locus ID: 66362

UniProt ID: Q7TQK4

Cytogenetics: 4 B1

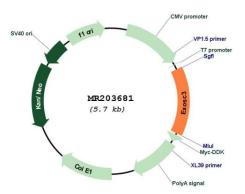
MW: 29.5 kDa

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 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. 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. EXOSC3 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC9 and EXOSC5 (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR203681