

Product datasheet for MG216808

Exosc8 (NM 001163570) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Exosc8 (NM_001163570) Mouse Tagged ORF Clone

Tag: TurboGFP

Symbol: Exosc8

Synonyms: 2310032N20Rik; CIP3; mKIAA4013

Mammalian Cell N

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >MG216808 representing NM_001163570 Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG216808 representing NM_001163570

Red=Cloning site Green=Tags(s)

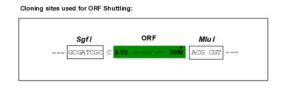
MAAGFKTVEPLEYYRRFLKENCRPDGRELGEFRATTVNIGSISTADGSALVKLGNTTVICGVKAEFAAPP VDAPDRGYVVFLSVPNVDLPPLCSSRFRTGPPGEEAQVTSQFIADVVDNSQVIKKEDLCISPGKLAWVLY CDLICLDYDGNILDACTFALLAALKNVQLPEVTINEETALAEVNLKKKSYLNVRTNPVATSFAVFDDTLL IVDPTGEEEHLSTGTLTVVTDEDGKLCCLHKPGGSGLTGAKLQDCMSRAVTRHKEVSKLLDEVIQSMRHK

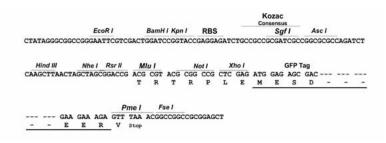
TRTRPLE - GFP Tag - V

Restriction Sites:

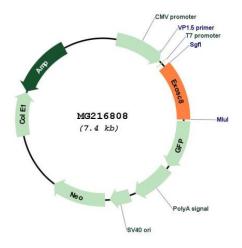
Sgfl-Mlul

Cloning Scheme:





Plasmid Map:



ACCN: NM_001163570

ORF Size: 840 bp

Exosc8 (NM_001163570) Mouse Tagged ORF Clone - MG216808

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 001163570.1</u>, <u>NP 001157042.1</u>

RefSeq Size: 1282 bp
RefSeq ORF: 843 bp
Locus ID: 69639
Cytogenetics: 3 C

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. EXOSC8 binds to ARE-containing RNAs (By similarity).

[UniProtKB/Swiss-Prot Function]