

Product datasheet for SC320874

EXOSC7 (NM_015004) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: EXOSC7 (NM_015004) Human Untagged Clone

Tag: Tag Free
Symbol: EXOSC7

Synonyms: EAP1; hRrp42p; p8; RRP42; Rrp42p

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_015004.2

GGCAGCATGGCGTCCGTGACGCTGAGCGAGGCGGAGAAGGTGTACATCGTGCATGGCGTC CAGGAAGACCTCCGTGTGGATGGCCGTGGCTGTGAGGACTACCGATGTGTCGAAGTGGAA ACTGATGTGGTGTCCAACACTAGTGGGTCCGCCAGGGTCAAGCTGGGTCACACAGACATC TTGGTGGGAGTGAAAGCAGAAATGGGGACGCCGAAGCTGGAGAAACCAAATGAAGGCTAC TTGGAGTTCTTTGTTGACTGTTCAGCCAGTGCTACCCCTGAATTTGAAGGTAGAGGAGGT GATGACCTTGGCACCGAGATCGCTAACACCCTCTATCGGATATTTAACAATAAAAGCAGT GTCGACTTAAAGACCCTCTGCATTAGTCCTCGGGAGCACTGCTGGGTTCTCTATGTGGAT GTGCTGCTTCTGGAATGTGGTGGAAATTTGTTTGATGCCATTTCCATTGCTGTAAAGGCT GCTCTCTTCAATACAAGGATACCAAGGGTTCGAGTTTTGGAGGATGAAGAGGGGTCGAAG GACATTGAATTGTCAGATGACCCTTATGACTGCATACGACTAAGTGTGGAGAATGTCCCC TGCATTGTCACTCTGTGCAAGATTGGCTATCGGCATGTGGTGGATGCTACTCTTCAGGAG GAGGCCTGCTCGCTGGCCAGCTTGCTGGTGTCGGTGACCAGCAAGGGAGTTGTGACGTGC ATGAGGAAAGTGGGGAAGGCCAGCCTGGACCCAGAGAGCATCTTCGAGATGATGGAGACT GGCAAGCGTGTGGGCAAGGTACTGCATGCCTCCTTGCAGAGTGTTCTGCACAAGGAAGAA AGCCTGGGGCCCAAGAGACAGAAAGTTGGATTCCTGGGATGATTTGCACATCAACTGCTC AACTGTGGATTGTTTTTACTTTTCCTTTTAAACCGGTTCGTATATATTTTTCTTCGCTG TTACGAATTTACAGCAGCATTTGTACATGTAAAATTAAAGGCTATTTTCTGGTAAAAAA

AAAAAAAAAAAAA

Restriction Sites: Please inquire ACCN: NM_015004



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EXOSC7 (NM_015004) Human Untagged Clone - SC320874

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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 015004.2</u>, <u>NP 055819.1</u>

 RefSeq Size:
 1036 bp

 RefSeq ORF:
 876 bp

 Locus ID:
 23016

 UniProt ID:
 Q15024

Cytogenetics: 3p21.31

Domains: RNase PH C

Protein Families: Stem cell - Pluripotency

Protein Pathways: RNA degradation



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.[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) encodes the protein.