

KD-Validated Anti-EXOSC1 Mouse Monoclonal Antibody

Mouse monoclonal antibody

Catalog # AGI2042

Product Information

Application	WB, FC
Primary Accession	Q9Y3B2
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	24GB8290
Calculated MW	21452
Gene Name	EXOSC1
Aliases	EXOSC1; Exosome Component 1; CSL4; CGI-108; Csl4p; Ski4p; SKI4; P13; Exosome Complex Component CSL4; HCsl4p; Homolog Of Yeast Exosomal Core Protein CSL4; CSL4 Exosomal Core Protein Homolog (Yeast); 3'-5' Exoribonuclease CSL4 Homolog; Exosomal Core Protein CSL4; PCH1F
Immunogen	Recombinant protein of human EXOSC1

Additional Information

Gene ID	51013
Other Names	Exosome complex component CSL4, Exosome component 1, EXOSC1, CSL4

Protein Information

Name	EXOSC1
Synonyms	CSL4
Function	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. EXOSC1 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC6 and EXOSC8.

Cellular Location

Nucleus, nucleolus. Nucleus. Cytoplasm

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