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KD-Validated Anti-EXOSC1 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2042

Specification

KD-Validated Anti-EXOSC1 Mouse Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q9Y3B2
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG1**
Calculated MW	**Predicted, 21 kDa, observed, 21 kDa KDa**
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**

KD-Validated Anti-EXOSC1 Mouse Monoclonal Antibody - Additional Information

Gene ID	**51013**

Other Names
Exosome complex component CSL4, Exosome component 1, EXOSC1, CSL4

KD-Validated Anti-EXOSC1 Mouse Monoclonal Antibody - 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.

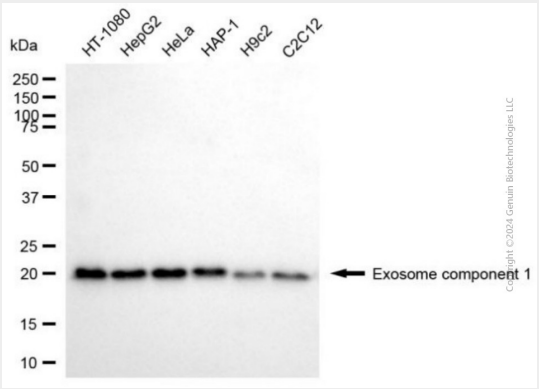
Cellular Location
Nucleus, nucleolus. Nucleus. Cytoplasm

KD-Validated Anti-EXOSC1 Mouse Monoclonal Antibody - Protocols

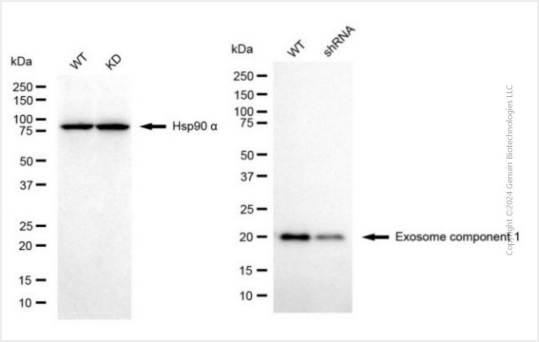
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-EXOSC1 Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-exosome component 1 antibody (Cat#AGI2042). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-exosome component 1 antibody (Cat#AGI2042, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-exosome component 1 antibody (Cat#AGI2042). Exosome

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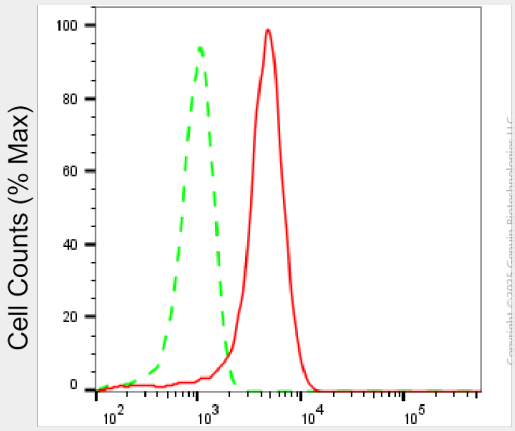
component 1 expression in wild-type (WT) and exosome component 1 (EXOSC1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-exosome component 1 antibody (Cat#AGI2042, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Exosome component 1-Alexa Fluor® 647

Flow cytometric analysis of Exosome component 1 expression in HepG2 cells using anti-Exosome component 1 antibody (Cat#AGI2042, 1:1,000). Green, isotype control; red, Exosome component 1.