

KD-Validated Anti-Drosha ribonuclease III Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1506

Specification

KD-Validated Anti-Drosha ribonuclease III Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB, FC, ICC <u>O9NRR4</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 159 kDa , observed, 159 kDa KDa
Gene Name Aliases	DROSHA DROSHA; Drosha Ribonuclease III; RNASE3L; RN3; HSA242976; RNASEN; Drosha, Double-Stranded RNA-Specific Endoribonuclease; Ribonuclease Type III, Nuclear; Ribonuclease 3; EC 3.1.26.3; RNase III; ETOHI2; P241; Putative Protein P241 Which Interacts With Transcription Factor Sp1; Drosha, Ribonuclease Type III; Putative Ribonuclease III; Nuclear RNase III Drosha; Ribonuclease III; Protein Drosha; RANSE3L; Etohi2
Immunogen	A synthesized peptide derived from human Drosha

KD-Validated Anti-Drosha ribonuclease III Rabbit Monoclonal Antibody - Additional Information

Gene ID 29102 Other Names Ribonuclease 3, 3.1.26.3, Protein Drosha, Ribonuclease III, RNase III, p241, DROSHA, RN3, RNASE3L, RNASEN

KD-Validated Anti-Drosha ribonuclease III Rabbit Monoclonal Antibody - Protein Information

Name DROSHA

Synonyms RN3, RNASE3L, RNASEN

Function

Ribonuclease III double-stranded (ds) RNA-specific endoribonuclease that is involved in the initial step of microRNA (miRNA) biogenesis. Component of the microprocessor complex that is required to process primary miRNA transcripts (pri-miRNAs) to release precursor miRNA (pre-miRNA) in the



nucleus. Within the microprocessor complex, DROSHA cleaves the 3' and 5' strands of a stem-loop in pri- miRNAs (processing center 11 bp from the dsRNA-ssRNA junction) to release hairpin-shaped pre-miRNAs that are subsequently cut by the cytoplasmic DICER to generate mature miRNAs. Involved also in pre-rRNA processing. Cleaves double-strand RNA and does not cleave single-strand RNA. Involved in the formation of GW bodies. Plays a role in growth homeostasis in response to autophagy in motor neurons (By similarity).

Cellular Location

Nucleus. Nucleus, nucleolus. Cytoplasm {ECO:0000250|UniProtKB:Q5HZJ0}. Note=A fraction is translocated to the nucleolus during the S phase of the cell cycle. Localized in GW bodies (GWBs), also known as P-bodies.

Tissue Location Ubiquitous..

KD-Validated Anti-Drosha ribonuclease III Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-Drosha ribonuclease III Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Drosha ribonuclease III antibody (Cat#AGI1506). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Drosha ribonuclease III antibody (Cat#AGI1506, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-Drosha ribonuclease III antibody (Cat#AGI1506). Drosha ribonuclease III expression in wild type (WT) and Drosha ribonuclease III shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Drosha ribonuclease III antibody (Cat#AGI1506, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Drosha ribonuclease III expression in HepG2 cells using Drosha ribonuclease III antibody (Cat#AGI1506, 1:2,000). Green, isotype control; red, Drosha ribonuclease III.



Immunocytochemical staining of HepG2 cells with anti-drosha ribonuclease III antibody (Cat#AGI1506, 1:1,000). Nuclei were stained blue with DAPI; Drosha ribonuclease III was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.