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DROSHA Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52002

Product Information

Application	WB
Primary Accession	Q9NRR4
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	159316

Additional Information

Gene ID	29102
Other Names	Ribonuclease 3, Protein Drosha, Ribonuclease III, RNase III, p241, DROSHA, RN3, RNASE3L, RNASEN
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DROSHA. The exact sequence is proprietary.
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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..

Background

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.

References

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