

# RNase III Drosha Polyclonal Antibody

Catalog # AP73844

### **Product Information**

ApplicationWB, IHC-PPrimary AccessionQ9NRR4

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW159316

#### **Additional Information**

**Gene ID** 29102

Other Names DROSHA; RN3; RNASE3L; RNASEN; Ribonuclease 3; Protein Drosha;

Ribonuclease III; RNase III; p241

**Dilution** WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-1:300. ELISA: 1/10000. Not

yet tested in other applications. IHC-P~~N/A

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **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..

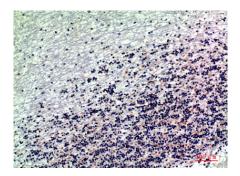
## **Background**

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.

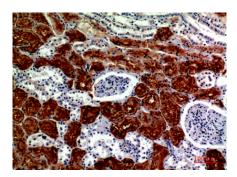
## **Images**



Western blot analysis of SH-SY5Y K562 HELA using RNase III Drosha antibody. Antibody was diluted at 1:1000. Secondary antibody was diluted at 1:20000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

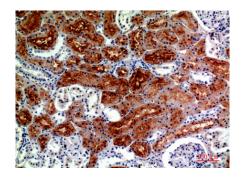


Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:200

Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:200



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