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Anti-DROSHA Antibody

Catalog # AP52002

Product Information

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

Additional Information

Gene ID	29102
Other Names	RN3; RNASE3L; RNASEN; Ribonuclease 3; Protein Drosha; Ribonuclease III; RNase III; p241
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human DROSHA. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

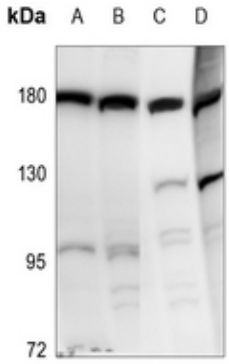
Name	DROSHA
Synonyms	RN3, RNASE3L, RNASEN
Function	Ribonuclease III double-stranded (ds) RNA-specific endoribonuclease that is involved in the initial step of microRNA (miRNA) biogenesis. Component of the microprocessor complex that is required to process primary miRNA transcripts (pri-miRNAs) to release 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..

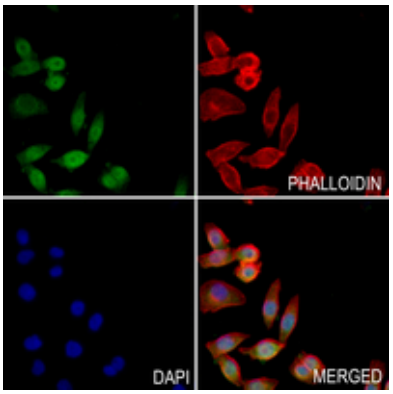
References

Wu H.,et al.J. Biol. Chem. 275:36957-36965(2000).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Schmutz J.,et al.Nature 431:268-274(2004).
Gunther M.,et al.Mol. Cell. Biochem. 210:131-142(2000).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



Western blot analysis of DROSHA expression in U87MG (A), PC3 (B), CT26 (C), C6 (D) whole cell lysates. (Predicted band size: 159 kD; Observed band size: 180 kD)



Immunofluorescent analysis of DROSHA staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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