

# Anti-Drosha Rabbit Monoclonal Antibody

Catalog # ABO13877

### Specification

# Anti-Drosha Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description**  WB, IHC, IF, ICC, FC <u>O9NRR4</u> Rabbit Rabbit IgG Human Monoclonal Liquid

Anti-Drosha Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

## Anti-Drosha 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

Calculated MW 159316 MW KDa

Application Details WB 1:1000-1:5000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>FC 1:50

**Subcellular Localization** Nucleus. Nucleus, nucleolus. 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 Specificity Ubiquitous..

**Contents** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human Drosha

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for



up to one month. Avoid repeated freeze-thaw cycles.

## Anti-Drosha 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..

### Anti-Drosha Rabbit 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
- <u>Cell Culture</u>

Anti-Drosha Rabbit Monoclonal Antibody - Images





Figure 1. Western blot analysis of Drosha using anti-Drosha antibody (M00111).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human 293T whole cell lysates,

Lane 2: human Hela whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human K562 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Drosha antigen affinity purified monoclonal antibody (Catalog # M00111) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Drosha at approximately 159 kDa. The expected band size for Drosha is at 159 kDa.



Figure 2. IHC analysis of Drosha using anti-Drosha antibody (M00111).

Drosha was detected in a paraffin-embedded section of human stomach cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-Drosha Antibody (M00111) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.





Figure 3. IHC analysis of Drosha using anti-Drosha antibody (M00111).

Drosha was detected in a paraffin-embedded section of human stomach cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-Drosha Antibody (M00111) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.