Datasheet for ABIN1686625
anti-DICER1 antibody (AA 1638-1899)

## 3 Images

## Overview

| Quantity: | $100 \mu \mathrm{~g}$ |
| :--- | :--- |
| Target: | DICER1 |
| Binding Specificity: | AA 1638-1899 |
| Reactivity: | Mouse |
| Host: | Mouse |
| Clonality: | This DICER1 antibody is un-conjugated |
| Conjugate: | Western Blotting (WB), Immunocytochemistry (ICC), Immunofluorescence (IF) |
| Application: |  |

Product Details

| Immunogen: | Fusion protein amino acids 1638-1899 of mouse Endoribonuclease Dicer |
| :--- | :--- |
| Clone: | S167-7 |
| Isotype: | IgG1 |
| Specificity: | Detects $\sim 215 \mathrm{kDa}$. |
| Cross-Reactivity: | Human, Mouse, Rat |
| Purification: | Protein G Purified |

Target Details

| Target: | DICER1 |
| :--- | :--- |
| Alternative Name: | Dicer (DICER1 Products) |


| Background: | Dicer is a member of the RNase III family that specifically cleaves double-stranded RNAs to generate microRNAs (miRNAs) (1). After long primary transcript pri-miRNAs are processed to stem-looped pre-miRNAs by Drosha (2), pre-miRNAs are transported to the cytoplasm and further processed by Dicer to produce 22-nucleotide mature miRNAs (3). The mature miRNA then becomes a part of the RNA-Induced Silencing Complex (RISC) and can bind to the 3' UTR of the target mRNA (3) |
| :---: | :---: |
| Gene ID: | 192119 |
| NCBI Accession: | NP_683750 |
| UniProt: | Q8R418 |
| Pathways: | Regulatory RNA Pathways, Stem Cell Maintenance, Ribonucleoprotein Complex Subunit Organization |
| Application Details |  |
| Application Notes: | - WB (1:1000) <br> - ICC/IF (1:100) <br> - optimal dilutions for assays should be determined by the user. |
| Comment: | $1 \mu \mathrm{~g} / \mathrm{ml}$ of ABIN1686625 was sufficient for detection of Dicer in $20 \mu \mathrm{~g}$ of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody. |
| Restrictions: | For Research Use only |
| Handling |  |
| Format: | Liquid |
| Concentration: | $1 \mathrm{mg} / \mathrm{mL}$ |
| Buffer: | PBS pH 7.4, 50 \% glycerol, 0.09 \% sodium azide, Storage buffer may change when conjugated |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | $-20^{\circ} \mathrm{C}$ |
| Storage Comment: | $-20^{\circ} \mathrm{C}$ |



## Immunocytochemistry

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Dicer Monoclonal Antibody, Clone S167-7 (ABIN1686625). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: $4 \%$ PFA for 15 min. Primary Antibody: Mouse Anti-Dicer Monoclonal Antibody (ABIN1686625) at $1: 50$ for overnight at $4^{\circ} \mathrm{C}$ with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain, Hoechst (blue) nuclear stain at $1: 800,1.6 \mathrm{mM}$ for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) Dicer Antibody (D) Composite.

## Western Blotting

Image 2. Western Blot analysis of Rat Brain Membrane showing detection of $\sim 215 \mathrm{kDa}$ Dicer protein using Mouse Anti-Dicer Monoclonal Antibody, Clone S167-7 . Lane 1: MW Ladder. Lane 2: Rat Brain Membrane. Load: $10 \mu \mathrm{~g}$. Block: 5\% milk. Primary Antibody: Mouse Anti-Dicer Monoclonal Antibody at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: TMB solution for 10 min at RT. Predicted/Observed Size: ~215 kDa.

## Immunofluorescence (fixed cells)

Image 3. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Dicer Monoclonal Antibody, Clone S167-7. Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4\% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Dicer Monoclonal Antibody at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT.


