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Dicer Antibody
Dicer Antibody, Clone S167-7
Catalog # ASM10250

Specification

Dicer Antibody - Product Information

Application	**WB**
Primary Accession	Q8R418
Other Accession	NP_683750.2
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**

Description
Mouse Anti-Mouse Dicer Monoclonal IgG1

Target/Specificity
Detects ~215kDa.

Other Names
Dicer1 Antibody, DCR Antibody, DCR1 Antibody, DCR-1 Antibody, Double-strand-specific ribonuclease Antibody, Helicase with RNase motif Antibody, HERNA Antibody, Helicase MOI Antibody, KIAA0928 Antibody, Endoribonuclease Dicer Antibody

Immunogen
Fusion protein amino acids 1638-1899 of mouse Endoribonuclease Dicer

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-416 was sufficient for detection of Dicer in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Cytoplasm

Dicer Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

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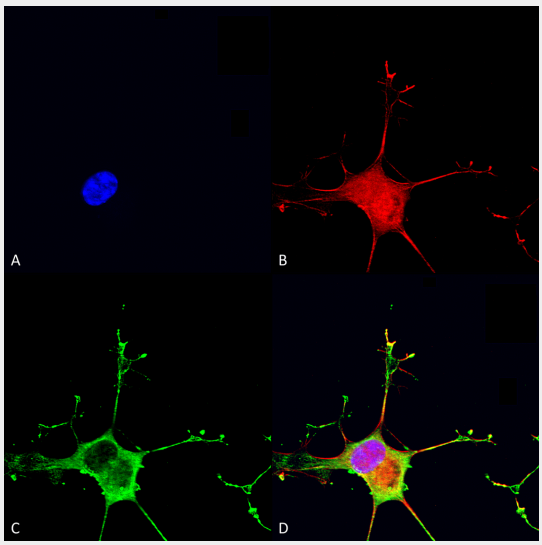
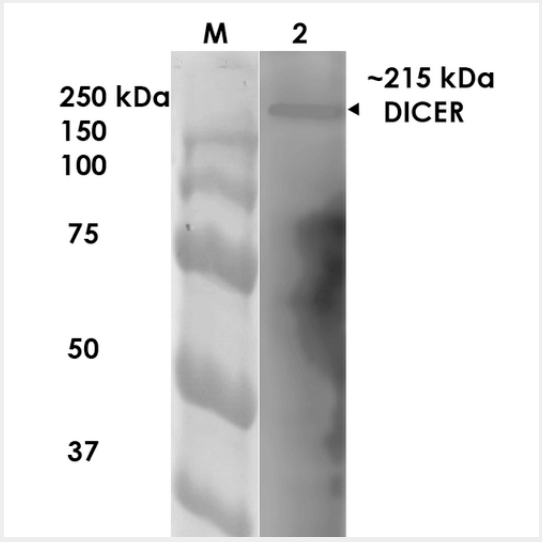
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Dicer Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Dicer Monoclonal Antibody, Clone N167/7 (ASM10250). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-Dicer Monoclonal Antibody (ASM10250) at 1:50 for overnight at 4°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, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) Dicer Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~215 kDa Dicer protein using Mouse Anti-Dicer Monoclonal Antibody, Clone N167/7 (ASM10250). Lane 1: MW Ladder. Lane 2: Rat Brain Membrane. Load: 10 µg. Block: 5% milk. Primary Antibody: Mouse Anti-Dicer Monoclonal Antibody (ASM10250) 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.

Dicer Antibody - 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)

Dicer Antibody - References

1. Hutvágner G. and Zamore P.D. (2002) Science 297: 2056-60.
2. Lee Y., et al. (2003) Nature 425: 415-9.
3. Diederichs S. and Haber, D.A. (2007) Cell 131: 1097-108.