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Anti-Argonaute 2 AGO2 Rabbit Monoclonal Antibody

Catalog Number: M00189

Overview

Product Name	Anti-Argonaute 2 AGO2 Rabbit Monoclonal Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Argonaute 2 AGO2 Rabbit Monoclonal Antibody catalog # M00189. Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IP, IF, IHC, ICC, WB
Clonality	Monoclonal AODE-1
Formulation	Rabbit IgG in stabilizing components, phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	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.
Host	Rabbit
Uniprot ID	Q9UKV8

Technical Details

Immunogen	A synthesized peptide derived from human Argonaute 2
Isotype	Rabbit IgG
Form	Liquid
Concentration	0.5mg/ml
Purification	Affinity-chromatography
Suggested Dilutions	WB 1:500-2000 IHC 1:50-200 ICC/IF 1:50-200 IP 1:20 FC 1:20

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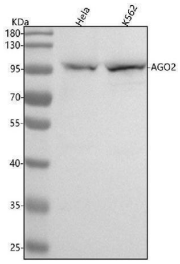
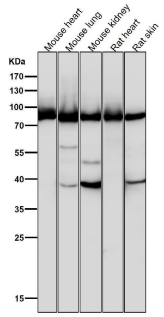
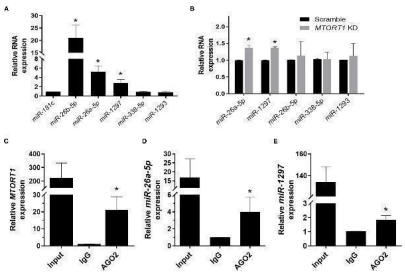
Anti-Argonaute 2 AGO2 Rabbit Monoclonal Antibody (M00189) Images



Western blot analysis of AGO2 using anti-AGO2 antibody (M00189). 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 Hela whole cell lysates, Lane 2: 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-AGO2 antigen affinity purified monoclonal antibody (Catalog # M00189) at 1:500 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 AGO2 at approximately 97 kDa. The expected band size for AGO2 is at 97 kDa.



All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



MTORT1 serves as a miRNA sponge. (A) Enrichment of miRNA candidates in mitochondria in MCF-7 cells. Candidates of miRNA were predicted using miRDB ( ). Relative expression levels of miRNA were measured by quantitative RT-PCR and compared to that of miR-181c , which was reported as a mitochondrial miRNA. (B) Relative expression levels of miRNA candidates in MTORT1 knockdown cells were measured by quantitative RT-PCR and normalized to 18S rRNA. (C–E) RNA immunoprecipitation analysis of MTORT1 (C) , miR-26a-5p (D) , and miR-1297 (E) using antibody against AGO2 in MCF-7 cells. Relative expression levels of AGO2-enriched non-coding RNA were measured by quantitative RT-PCR and compared to those pulled down by IgG. The results are means ± SDs (n = 3). * P < 0.05.Index in PubMed under a CC BY license. PMID: 34141617

NDRG1-OT1 serves as a sponge for miR-875-3p . A , B Distribution of NDRG1-OT1 in MDA-MB-231 cells under normoxia (A) and hypoxia (B). Cytoplasmic and nuclear RNA were fractionated in MDA-MB-231 cells under normoxia

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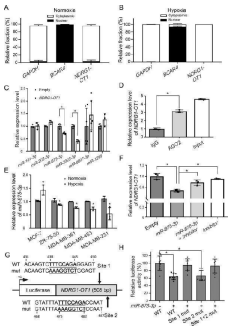
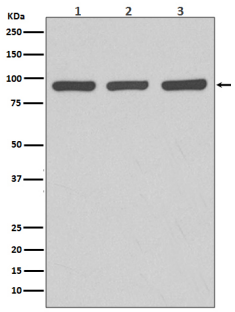


(A) and hypoxia (B). Relative abundance of RNA was normalized to the total amount of RNA and detected by qPCR. GAPDH : cytoplasmic marker; BCAR4 : nuclear marker. C Relative expression levels of six predicted miRNAs in MDA-MB-231 cells overexpressing NDRG1-OT1 . The candidate miRNAs binding NDRG1-OT1 were predicted by miRDB ( ). The expression levels of miRNAs were measured by qPCR and normalized to U6 . D RIP analysis of NDRG1-OT1 using antibody against AGO2 in normoxia. The RIP enrichment of the AGO2-associated lncRNA was measured by qPCR and normalized to 18 S rRNA. The relative fold enrichment was calculated as compared to the IgG group. E Expression levels of miR-875-3p in five breast cancer cell lines under hypoxia and normoxia, detected by qPCR. Loading control: U6 snRNA. The relative expression levels in each cell line were compared with those of the normoxic group, respectively. F Relative expression of NDRG1-OT1 in MDA-MB-231 cells overexpressing miR-875-3p , and followed by treatment of miR-875-3p inhibitor (50 nM). Loading control: GAPDH . (n = 5). G Schematic representation of firefly luciferase constructs containing the sequence of NDRG1-OT1 (WT) and two mutations of miR-875-3p binding sites (sites 1 and 2). H Luciferase reporter assays of NDRG1-OT1 in HEK293T cells overexpressing miR-875-3p . All data shown are the means ± SDs. * P



Western blot analysis of Argonaute 2 expression in (1) HeLa cell lysate; (2) RAW 264.7 cell lysate; (3) C6 cell lysate.

2 Publications Citing This Product

1. PubMed ID: 10.1016/j.ymthe.2018.08.022, Therapeutic Potential of OMe-PS-miR-29b1 for Treating Liver Fibrosis

2. PubMed ID: 33177098, Xin X,Kumar V,Lin F,Kumar V,Bhattarai R,Bhatt VR,Tan C,Mahato RI. Redox-responsive nanoplatform for codelivery of miR-519c and gemcitabine for pancreatic cancer therapy. Sci Adv.2020 Nov 11;6(46):eabd6764.doi:10.1126/sciadv.abd6764.PMID:33177098.

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