Product Datasheet

Ago2/eIF2C2 Antibody (2E12-1C9) - Azide and BSA Free
H00027161-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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Updated 9/9/2025 v.20.1

H00027161-M01

Ago2/eIF2C2 Antibody (2E12-1C9) - Azide and BSA Free

Product Information

Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	2E12-1C9
Preservative	No Preservative
Isotype	IgG1 Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4

Product Description

Description	Novus Biologicals Mouse Ago2/eIF2C2 Antibody (2E12-1C9) - Azide and BSA Free (H00027161-M01) is a monoclonal antibody validated for use in IHC, WB, ELISA, ICC/IF, IP and ChIP. Anti-Ago2/eIF2C2 Antibody: Cited in 95 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	27161
Gene Symbol	AGO2
Species	Human, Mouse, Rat, Porcine, Monkey, Xenopus
Reactivity Notes	Rat reactivity reported in scientific literature (PMID: 26858302). Mouse reactivity reported in scientific literature (PMID: 28127848)
Specificity/Sensitivity	EIF2C2 - eukaryotic translation initiation factor 2C, 2
Immunogen	EIF2C2 (AAH07633.1, 483 a.a ~ 859 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. MPIQGQPCFCKYAQGADSVEPMFRHLKNTYAGLQLVVVILPGKTPVYAEVKRV GDTVLGMATQCVQMKNVQRTTPQTLSNLCLKINVKLGGVNNILLPQGRPPVFQ QPVIFLGADVTHPPAGDGKKPSIAAVVGSMDAHPNRYCATVRVQQHRQEIIQD LAAMVRELLIQFYKSTRFKPTRIIFYRDGVSEGQFQQVLHHELLAIREACIKLEKD YQPGITFIVVQKRHHTRLFCTDKNERVGKSGNIPAGTTVDTKITHPTEFDFYLCS HAGIQGTSRPSHYHVLWDDNRFSSDELQILTYQLCHTYVRCTRSVSIPAPAYYA HLVAFRARYHLVDKEHDSAEGSHTSGQSNGRDHQALAKAVQVHQDTLRTMYF A
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.

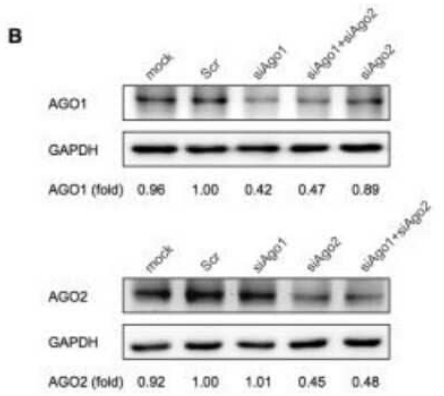
Product Application Details

Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Immunoblotting, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Chromatin Immunoprecipitation (ChIP), Knockdown Validated
Recommended Dilutions	Western Blot 1:500, ELISA 1:100-1:2000, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunoprecipitation, Immunohistochemistry-Paraffin 1:10-1:500, Immunoblotting, Chromatin Immunoprecipitation (ChIP) 1:10-1:500, Knockdown Validated

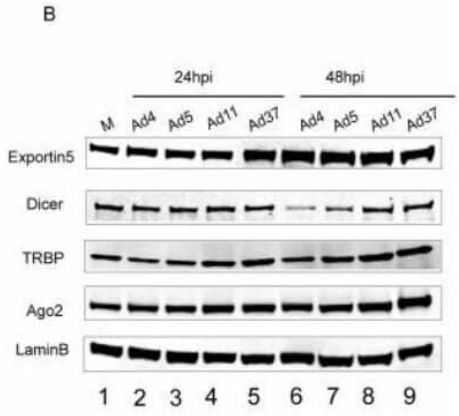
Application Notes	Antibody reactive against recombinant protein and cell lysate for Western Blot. Has also been used for immunofluoresence, immunohistochemistry (paraffin), RNAi validation and ELISA and Sandwich ELISA. Chromatin Immunoprecipitation was reported in scientific literature. Use in immunprecipitation reported in scientific literature (PMID 24658750). Use in immunoblotting reported in scientific literature (PMID: 31393866).

Images

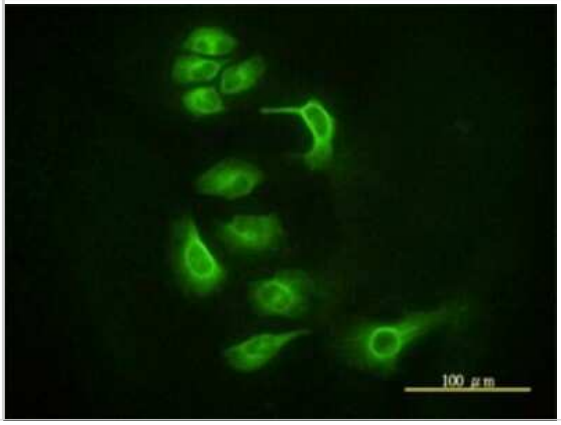
Western Blot: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - AGO2 contributed predominately to silencing activity in both regions. The relative AGO protein levels were detected by western blot 56 hours post siAgo transfection, at the time point when Ago2/eIF2C2 ablated cells were harvested to evaluate luciferase activities. GAPDH was included as loading control. The intensity of protein bands was quantified by ImageJ software (NIH, USA). All experiments were performed at least twice. Image collected and cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0049309) licensed under a CC-BY license.

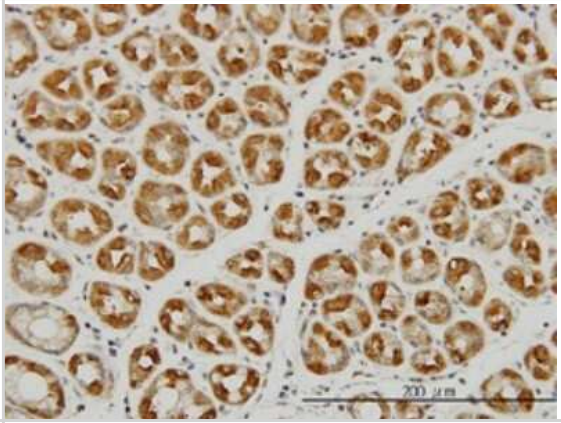
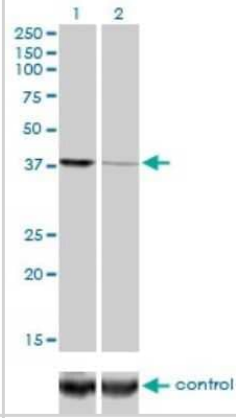
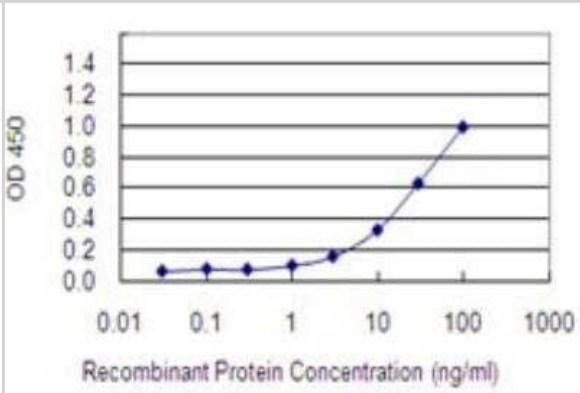
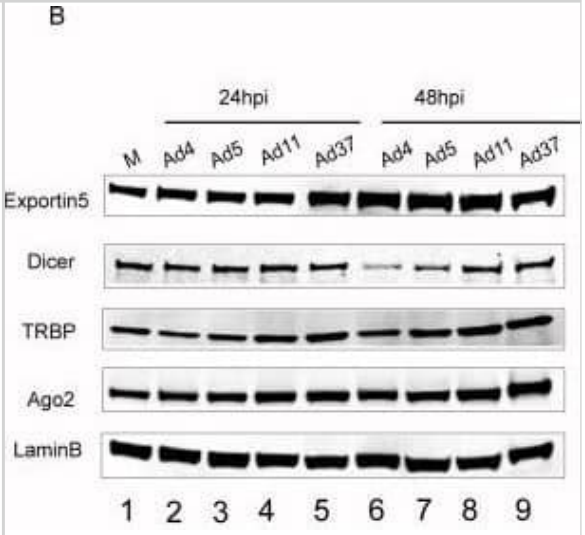


Western Blot: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - The impact of different HAd infections on RNAi/miRNA-pathway proteins.HAd infections do not affect RNAi/miRNA-pathway protein levels. Western blot analysis on the same protein samples as in panel A was used to monitor the levels of RNAi/miRNA-pathway proteins Exportin 5, Dicer, TRBP and Ago2/eIF2C2. Detection of the Lamin B protein served as a loading control. Letter "M" denotes mock, non-infected samples. The different panels were repeated at least two times. Image collected and cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0105746) licensed under a CC-BY license.

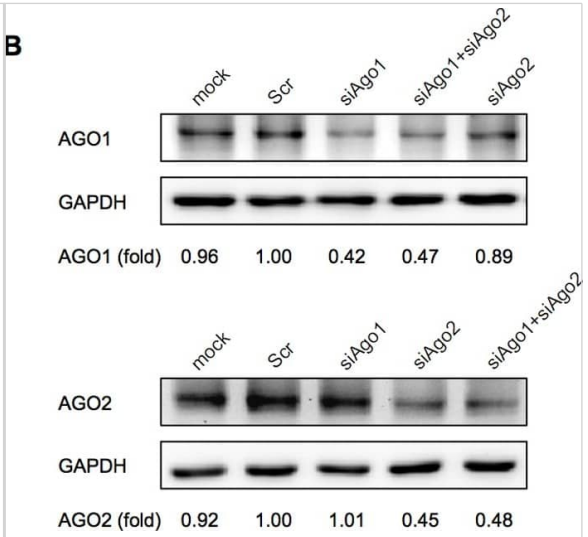


Immunocytochemistry/Immunofluorescence: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - Analysis of monoclonal antibody to EIF2C2 on HeLa cell. Antibody concentration 10 ug/ml.



Immunohistochemistry-Paraffin: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - Analysis of monoclonal antibody to EIF2C2 on formalin-fixed paraffin-embedded human stomach. Antibody concentration 3 ug/ml.	
Western Blot: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - Analysis of EIF2C2 over-expressed 293 cell line, cotransfected with EIF2C2 Validated Chimera RNAi (Cat # H00027161-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with EIF2C2 monoclonal antibody (M01), clone 2E12-1C9 (Cat # H00027161-M01). GAPDH (36.1 kDa) used as specificity and loading control.	
ELISA: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - Detection limit for recombinant GST tagged EIF2C2 is 0.3 ng/ml as a capture antibody.	
Western Blot: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - The impact of different HAd infections on RNAi/miRNA-pathway proteins. (A) Efficiency of different HAd infections. HeLa cells were infected with the indicated viruses, followed by a 35S-methionine pulse labeling after 24 & 48 hpi. Total protein lysates were separated on an SDS-PAGE & protein synthesis visualized by autoradiography. Accumulation of late viral hexon protein is indicated by an arrow. (B) HAd infections do not affect RNAi/miRNA-pathway protein levels. Western blot analysis on the same protein samples as in panel A was used to monitor the levels of RNAi/miRNA-pathway proteins Exportin 5, Dicer, TRBP & Ago2. Detection of the Lamin B protein served as a loading control. Letter “M” denotes mock, non-infected samples. The different panels were repeated at least two times. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/25144466), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Western Blot: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - AGO2 contributed predominately to silencing activity in both regions.(A) The relative AGO mRNA levels were measured by quantitative RT-PCR 24 hours post siAgo transfection. Results were average values of assays in triplicates, & all experiments were repeated three times. (B) The relative AGO protein levels were detected by western blot 56 hours post siAgo transfection, at the time point when AGO ablated cells were harvested to evaluate luciferase activities. GAPDH was included as loading control. The intensity of protein bands was quantified by ImageJ software (NIH, USA). All experiments were performed at least twice. (C) The normalized silencing efficacies of siR-04 on perfectly matched target in CDS versus 3′-UTR after AGOs ablation. Silencing of AGO expression was carried out by gene-specific siRNA assessed in the previous study [9], & subsequently, influence of the gene silencing on perfectly-match tolerance was evaluated by reporter system. All data were normalized to mock. (D) The normalized silencing efficacies of siR-04 on single-nucleotide mismatched target sites in CDS versus 3′-UTR at the indicated positions (4C, 10U, 12G, 17A) after AGOs ablation. The target site location & siRNA:mRNA match pattern were given under the x-axis. Error bars represented SD. Data were average values of assays in triplicates, & all experiments were repeated at least twice. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/23145149), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunoprecipitation: Ago2/eIF2C2 Antibody (2E12-1C9) [H00027161-M01] - Snail1 is a target of miR□30c. (A) Sequence alignment between miR□30c & the 3′□UTR of Snail1 among several species. (B) Ago2 protein levels in co□immunoprecipitated products detected by Western blot. IgGHC, IgG heavy chain; IgGLC, IgG light chain. (C) Relative expression of Snail1 in the whole RNA (left) & RNA of the nonspecific IgG or anti□Ago2 co□IP (right) from the HG□treated HK2 cell lysates. #P < 0.05 vs. miR□con + input, *P < 0.05 vs. miR□con + IgG IP. (D) Schematic diagram of the luciferase reporter plasmids of pMIR□Snail1 3′□UTR & pMIR□Snail1 3′□UTR mut, & the potential target site of miR□30c on the 3′□UTR of Snail1. (E) Regulation of miR□30c on 3′□UTR of Snail1 in HEK293 cells by luciferase reporter assay. *P < 0.05 vs. Snail1 3′□UTR + miR□con. (F) Snail1 protein levels of HK2 cells with different treatments detected by Western blot. *P < 0.05 vs. NG, #P < 0.05 vs. HG + miR□con, &P < 0.05 vs. HG + inhibitor□con. (G) Snail1 protein levels of renal cortex detected by Western blot. *P < 0.05 vs. C57BL/Ks. #P < 0.05 vs. db/db control. (H) Stability curves of Snail1 mRNA in HG□treated HK2 cells after transfection of miR□30c mimics (left) or inhibitor (right). (I) The relative abundance of individual mRNA in each fraction was presented as the percentage of the total fraction following miR□con (left) or miR□30c (right) transfection. (J) The association of the Snail1 mRNA with putative polysome fractions (fraction 12 & fraction 13) after miR□30c mimics transfection. Data are representative of three experiments. Data are expressed as mean ± SEM, n ≥ 3. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/28127848), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Publications

Lin MC, Kuo WH, Chen SY et Al. Ago2/CAV1 interaction potentiates metastasis via controlling Ago2 localization and miRNA action EMBO Rep 2024-04-22 [PMID: 38649663]

De D, Bhattacharyya SN., et Al. Amyloid-? oligomers block lysosomal targeting of miRNPs to prevent miRNP recycling and target repression in glial cells J Cell Sci 2021-07-12 [PMID: 34096603]

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Ye Q, Li D, Siwen Z et al. A plant immune protein enables broad antitumor response by rescuing microRNA deficiency. Cell. 2022-05-26 [PMID: 35623329]

Vladimir L, Karel D, Louis J et al. Identification of a Novel HBV Encoded miRNA Using Next Generation Sequencing Viruses. 2022-06-05 [PMID: 35746694]

Yuying L, Chenghui Y, Jiahui F et al. MiR-221-3p targets Hif-1? to inhibit angiogenesis in heart failure. Lab Invest. 2020-09-01 [PMID: 32873879]

Jiabing Z, Huizhen L, Beibei D et al. The nuclear and cytoplasmic roles of miR-320 in non-alcoholic fatty liver disease. Aging (Albany NY). 2020-11-07 [PMID: 33186123]

Kute P, Ramakrishna S, Neelagandan N et al. NMDAR mediated translation at the synapse is regulated by MOV10 and FMRP. Mol Brain. 2019-07-10 [PMID: 31291981]

Park J, Seo J, Ahn N et al. UPF1/SMG7-dependent microRNA-mediated gene regulation. Nat Commun. 2019-09-13 [PMID: 31519907]

Tiwari D, Brager D, Rymer J et al. MicroRNA inhibition upregulates hippocampal A-type potassium current and reduces seizure frequency in a mouse model of epilepsy. Neurobiol Dis. 2019-06-15 [PMID: 31212067]

Monika D, Bronislawa S, Roman J et al. hsa-miR-20b-5p and hsa-miR-363-3p Affect Expression of PTEN and BIM Tumor Suppressor Genes and Modulate Survival of T-ALL Cells In Vitro. Cells. 2020-05-05 [PMID: 32380791]

Aida M, Stefano L, Eshita S et al. High-Throughput Identification of MiR-145 Targets in Human Articular Chondrocytes. Life (Basel). 2020-05-11 [PMID: 32403239]

More publications at http://www.novusbio.com/H00027161-M01

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