

Datasheet for ABIN7165091
anti-AGO2 antibody (AA 517-818)



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5 Images

Overview

Quantity:	100 µg
Target:	AGO2
Binding Specificity:	AA 517-818
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This AGO2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Chromatin Immunoprecipitation (ChIP)

Product Details

Immunogen:	Recombinant Human Protein argonaute-2 protein (517-818AA)
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	>95%, Protein G purified

Target Details

Target:	AGO2
Alternative Name:	AGO2 (AGO2 Products)
Background:	Background: Required for RNA-mediated gene silencing (RNAi) by the RNA-induced silencing

complex (RISC). The minimal RISC appears to include AGO2 bound to a short guide RNA such as a microRNA (miRNA) or short interfering RNA (siRNA). These guide RNAs direct RISC to complementary mRNAs that are targets for RISC-mediated gene silencing. The precise mechanism of gene silencing depends on the degree of complementarity between the miRNA or siRNA and its target. Binding of RISC to a perfectly complementary mRNA generally results in silencing due to endonucleolytic cleavage of the mRNA specifically by AGO2. Binding of RISC to a partially complementary mRNA results in silencing through inhibition of translation, and this is independent of endonuclease activity. May inhibit translation initiation by binding to the 7-methylguanosine cap, thereby preventing the recruitment of the translation initiation factor eIF4-E. May also inhibit translation initiation via interaction with EIF6, which itself binds to the 60S ribosomal subunit and prevents its association with the 40S ribosomal subunit. The inhibition of translational initiation leads to the accumulation of the affected mRNA in cytoplasmic processing bodies (P-bodies), where mRNA degradation may subsequently occur. In some cases RISC-mediated translational repression is also observed for miRNAs that perfectly match the 3' UTR. Can also up-regulate the translation of specific mRNAs under certain growth conditions. Binds to the AU element of the 3-UTR of the TNF (TNF-alpha) mRNA and up-regulates translation under conditions of serum starvation. Also required for transcriptional gene silencing (TGS), in which short RNAs known as antigene RNAs or agRNAs direct the transcriptional repression of complementary promoter regions.

Aliases: Ago 2 antibody, AGO2_HUMAN antibody, Argonaute 2 antibody, argonaute 2, RISC catalytic component antibody, Argonaute RISC catalytic component 2 antibody, Argonaute2 antibody, CTA-204B4.6 antibody, dAgo2 antibody, eIF 2C 2 antibody, eIF-2C 2 antibody, eIF2C 2 antibody, Eif2c2 antibody, Eukaryotic translation initiation factor 2C 2 antibody, Eukaryotic translation initiation factor 2C subunit 2 antibody, hAgo2 antibody, MGC3183 antibody, PAZ Piwi domain protein antibody, PPD antibody, Protein argonaute-2 antibody, Protein slicer antibody, Q10 antibody, Slicer protein antibody

UniProt:	Q9UKV8
Pathways:	Fc-epsilon Receptor Signaling Pathway , Regulatory RNA Pathways , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Ribonucleoprotein Complex Subunit Organization

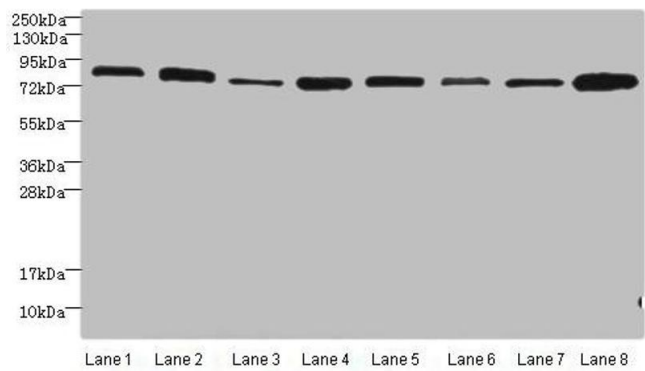
Application Details

Application Notes:	Recommended dilution: WB:1:1000-1:5000, IHC:1:100-1:1500,
Restrictions:	For Research Use only

Handling

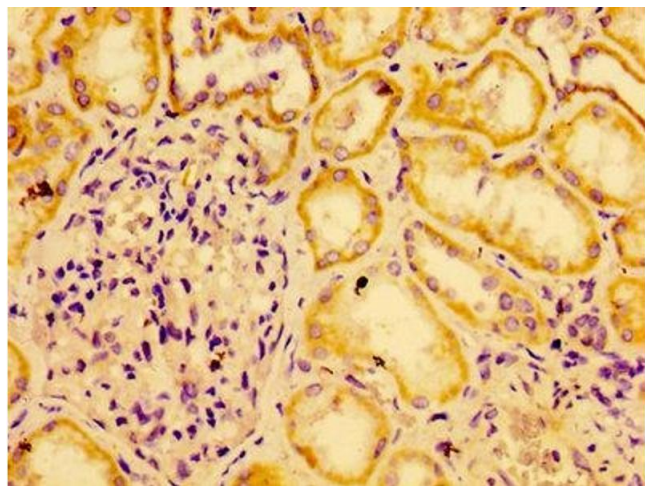
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



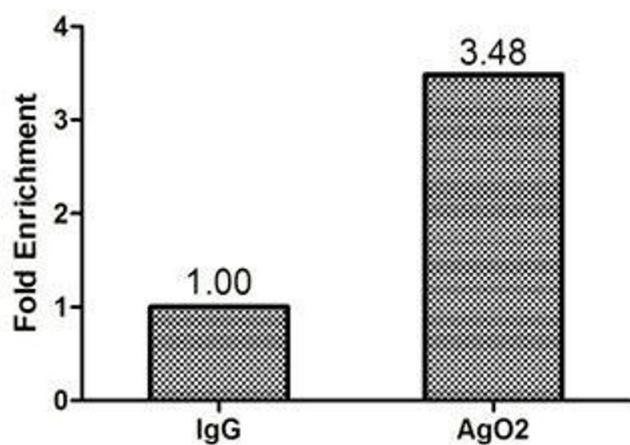
Western Blotting

Image 1. Western blot All lanes: Protein argonaute-2 antibody at 2 µg/mL Lane 1: A549 whole cell lysate Lane 2: Jurkats whole cell lysate Lane 3: MCF-7 whole cell lysate Lane 4: HepG2 whole cell lysate Lane 5: Raw264.7 whole cell lysate Lane 6: K562 whole cell lysate Lane 7: Mouse liver tissue Lane 8: Mouse kidney tissue Secondary Goat polyclonal to rabbit IgG at 1/10000 dilution Predicted band size: 98, 94 kDa Observed band size: 94 kDa



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human kidney tissue using ABIN7165091 at dilution of 1:100



Immunohistochemistry

Image 3. Chromatin Immunoprecipitation Hela (1.1×10^6) were cross-linked with formaldehyde, sonicated, and immunoprecipitated with 4 μ g anti-AgO2 or a control normal rabbit IgG. The resulting ChIP DNA was quantified tissue using real-time PCR with primers against the SLC1A5 promoter.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN7165091.