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PRODUCT DATASHEET

Anti-Argonaute 2 (N-terminus) Antibody

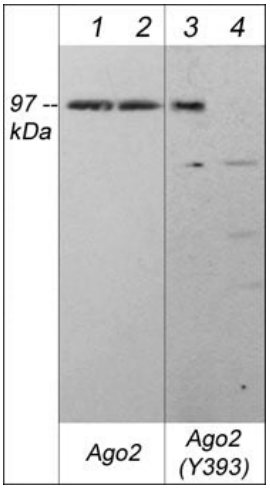
phosphosolutions ANTIBODIES THAT WORK

Product Details

Available Variants	100 µL (SKU:AM5271)
Conjugate	Unconjugated
Isotype	IgG2a
Clone	11A9
Gene Name	AGO2
Host Species	Rat
Format	Protein G Purified
Physical State	Liquid
Buffer	PBS + 0.05% NaN3
Applications	ELISA, WB
Dilution Ranges	WB: 1:250
Species Reactivity	Bovine, Human
Immunogen	Clone 11A9 was generated from an Ago2 synthetic peptide (coupled to KLH) corresponding to amino acids in the N-terminus of human Ago2. This sequence has low homology to other argonaute family members.
Specificity	The antibody detects a 97 kDa* protein corresponding to the apparent molecular mass of Ago2 on SDS-PAGE immunoblots of several human cell lines, A431, HeLa, MCF-7, and K562. The antibody does not detect rat or mouse Ago2, but will detect bovine Ago2.
Molecular Weight	97
Quality Control	Western blots performed on each lot.
Storage	Recommended that the undiluted antibody be aliquoted into smaller working volumes (10-30 uL/vial depending on usage) upon arrival and stored long term

	at -20° C or -80° C, while keeping a working aliquot stored at 4° C for short term. Avoid freeze/thaw cycles. Stable for at least 1 year.
UniProt ID	Q9UKV8 UniProt Summary: 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' untranslated region (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 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.
Country of Origin	United States
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
NCBI Gene ID	27161

Product Images



Western blot analysis of human A431 cells treated with EGF (100 ng/ml for 60 min.) (lanes 1-4). The blot was treated with lambda phosphatase (lanes 2 & 4) then probed with rat monoclonal anti-Ago2 (AM5271) (lanes 1 & 2) and rabbit polyclonal anti-Ago2 (Tyr-393) phospho-specific antibody (lanes 3 & 4).

Created on 20. November 2026 | All information without guarantee