

Anti-Argonaute 2 Antibody

Catalog # AN1636

Specification

Anti-Argonaute 2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW	WB <u>O9UKV8</u> Bovine, Chicken, Drosophila, C.Elegans Rabbit Rabbit Polyclonal IgG 97208
Calculated MW	97208
	IgG

Anti-Argonaute 2 Antibody - Additional Information

Gene ID Other Names Ago2, Argonaute, eIF-2C2, eIF2C2; protein slicer

Target/Specificity

Several classes of small RNAs, including short interfering RNAs (siRNAs), microRNAs (miRNAs), and Piwi-interacting RNAs (piRNAs) have been identified. MicroRNAs are about 21 nucleotides in length and have been implicated in many cellular processes such as development, differentiation, and stress response. These small RNAs function together with complexes called micro-ribonucleoproteins (miRNPs) to regulate gene expression by modulating mRNA translation or stability. Among the most important components in these complexes are argonaute proteins. There are four members in the mammalian argonaute family and only argonaute 2 (Ago2) possesses the Slicer endonuclease activity. Argonaute proteins participate in various steps of microRNA-mediated gene silencing, such as repression of translation and mRNA turnover. These activities may be regulated by cell signaling events that alter argonaute phosphorylation. EGFR phosphorylates Tyr-393 in Ago2, which reduces binding to Dicer and inhibits miRNA processing. Akt3 phosphorylates Ago2 at Ser-387 leading to reduced mRNA cleavage and enhanced translational repression.

27161

Dilution WB~~1:1000

Format Antigen Affinity Purified

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Argonaute 2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping Blue Ice



Anti-Argonaute 2 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Argonaute 2 Antibody - Images



Western blot analysis of mouse recombinant Ago2 full length protein (lanes 1-4). The blot was treated with lambda phosphatase (lanes 2 & 4) then probed with rabbit polyclonal anti-Ago2 (AP5281) (lanes 1 & 2) and rabbit polyclonal anti-Ago2 (Ser-387) phospho-specific antibody (lanes 3 & 4).

Anti-Argonaute 2 Antibody - Background

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