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Anti-Argonaute 2 Antibody

Catalog # AN1636

Product Information

Application	WB, ICC
Primary Accession	Q9UKV8
Reactivity	Rat
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	97208

Additional Information

Gene ID	27161
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.
Dilution	WB~~1:1000 ICC~~N/A
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

Background

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.