

Rabbit anti-Mouse Argonaute-2/AGO2 Polyclonal Antibody | anti-AGO2 antibody

Anti-Argonaute-2/AGO2 Antibody, Rabbit Polyclonal

CATALOG # AAA259468	HOST Rabbit	REACTIVITY Mouse	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

Argonaute-2/AGO2; Polyclonal Antibody; Anti-Argonaute-2/AGO2 Antibody; Rabbit Polyclonal; Argonaute-2/AGO2 Antibody; Rabbit PAb; Antigen Affinity Purified; argonaute RISC catalytic component 2; Anti-1110029L17Rik Antibody; Anti-2310051F07Rik Antibody; Anti-Ago2 Antibody; Anti-Eif2c2 Antibody; Anti-Gerp95 Antibody; Anti-Gm10365 Antibody; Anti-Kiaa4215 Antibody; Anti-mKIAA4215 Antibody; anti-AGO2 antibody

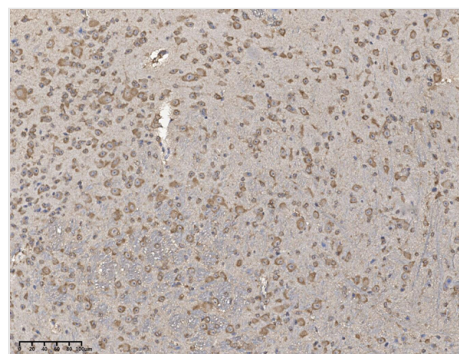
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Mouse Argonaute-2/AGO2
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-AGO2 antibody	IHC (Immunohistochemistry)
Immunogen	Recombinant Mouse Argonaute-2/AGO2 Protein (Q8CJG0; Met1-Ala860). Argonaute-2/AGO2 specific IgG was purified by Mouse Argonaute-2/AGO2 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2 degree C-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles. This antibody is shipped as liquid solution at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

IMAGES


IHC (Immunohistochemistry)

Immunochemical staining of Mouse AGO2 in Mouse stomach with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.


IHC (Immunohistochemistry)

Immunochemical staining of Mouse AGO2 in Mouse brain with rabbit polyclonal antibody at 1:100 dilution, formalin-fixed paraffin embedded sections.

ADDITIONAL INFORMATION

Related Product Information for anti-AGO2 antibody	Argonaute 2 (AGO2), also known as Eukaryotic translation initiation factor 2C2 (EIF2C2), belongs to the Argonaute family, AGO subfamily, which is a component of the RNA-induced silencing complex (RISC) and mediates small interfering RNA (siRNA)-directed mRNA cleavage and microRNA translational suppression. AGO2 protein is the catalytic engine of mammalian RNAi. It contains a PIWI domain that is structurally related to RNases H and possibly shares with them a two-metal-ion catalysis mechanism. Human AGO2 was unable to cleave preformed RNA duplexes and exhibited weaker binding affinity for RNA duplexes compared with the single strand RNA. The enzyme exhibited greater RNase H activity in the presence of Mn ²⁺ compared with Mg ²⁺ . Human AGO2 exhibited weaker binding affinities and reduced cleavage activities for antisense RNAs with either a 5'-terminal hydroxyl or abasic nucleotide. In mouse hematopoiesis, AGO2 controls early development of lymphoid and erythroid cells. AGO2 is a highly specialized member of the Argonaute family with an essential nonredundant Slicer-independent function within the mammalian miRNA pathway. AGO2 regulates dFMR1 expression, and the relationship between dFMR1 and AGO2 was defined by their physical interaction and co-regulation of downstream targets. AGO2 and dFMR1 are also connected through a regulatory relationship. AGO2 is a regulator of dFMR1 expression and have clarified an important developmental role for AGO2 in the nervous system and germ line that requires dFMR1 function. In addition, AGO2 is regulated at both the transcriptional and posttranslational level, and also implicate AGO2 and enhanced micro-RNA activity in the tumorigenic progression of breast cancer cell lines.
References	O'Carroll D. et al. (2007). Slicer-independent role of Argonaute 2 in hematopoiesis and the microRNA pathway. <i>Gene Dev.</i> 21(16): 1999-2004. Peppe AS. et al. (2009). Argonaute suppresses Drosophila fragile 1 expression preventing neurogenesis and oogenesis defects. <i>PLoS One.</i> 4(10): e7618. Lim WF. et al. (2009). Binding and cleavage specificities of human Argonaute2. <i>Bio. Chem.</i> 284(38): 26017-28. Adam BD. et al. (2009). Argonaute-2 expression in regulate bone epidermal growth factor receptor and mitogen-activated protein kinase signaling and correlate with transformation phenotype in breast cancer cells. <i>Endocrinology.</i> 150(1): 14-23. Salvador V. et al. (2010). Bacterial expression of mouse Argonaute 2 for functional and mutational studies. <i>In: Mol. Sci.</i> 11(2): 745-53. Wilso JA. et al. (2011). Human Ago 2 requires efficient microRNA 12 regulation of hepatitis virus RNA accumulation and translation. <i>Virol.</i> 85(5): 2342-50.

NCBI AND UNIPROT INFORMATION

NCBI GI #	219842353
NCBI GeneID	239528
NCBI Accession #	NP_694818.3
NCBI GenBank Nucleotide #	NM_153178.4
UniProt Accession #	Q8CJG0 ; Q4VAB3 ; Q571J6 ; A1A563
Molecular Weight	97,304 Da
NCBI Official Full Name	protein argonaute-2
NCBI Official Synonym Full Names	argonaute RISC catalytic subunit 2
NCBI Official Symbol	Ago2
NCBI Official Synonym Symbols	Eif2c2; Gerp95; Gm10365; AI225898; AL022874; AW546247; mKIAA4215; 1110029L17Rik; 2310051F07Rik; ENSMUSG00000072493
NCBI Protein Information	protein argonaute-2
UniProt Protein Name	Protein argonaute-2
UniProt Gene Name	Ago2
UniProt Synonym Gene Names	Eif2c2; Kiaa4215; Argonaute2; mAgo2; eIF-2C 2; eIF2C 2
UniProt Entry Name	AGO2_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.