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Datasheet for ABIN6942129
anti-AGO2 antibody

Overview

Quantity:	100 µL
Target:	AGO2
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This AGO2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc))

Product Details

Immunogen:	Human Argonaute 2 between 1 to 150 amino acids
Clone:	7C3
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Purification:	Purified by Protein A.

Target Details

Target:	AGO2
Alternative Name:	Argonaute 2 (AGO2 Products)

Target Details

Background: Synonyms: Protein argonaute-2, Argonaute RISC catalytic component 2, Eukaryotic translation initiation factor 2C 2, PAZ Piwi domain protein, Protein slicer, Argonaute2, hAgo2, eIF-2C 2, eIF2C 2, PPD, AGO2, EIF2C2

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' 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 (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.

Gene ID: 27161

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: WB 1:300-5000
FCM 1:20-100
IHC-P 1:200-400
IF(ICC) 1:50-200
IHC()

Application Details

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 1xTBS (pH 7.4), 1 % BSA, 40 %Glycerol and 0.05 % Sodium Azide.

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

Storage Comment: Store at -20°C for 12 months.

Expiry Date: 12 months