Datasheet for ABIN6259825

anti-AGO2 antibody (N-Term)

2 Images

Go to Product page

Overview

Quantity:	100 µL
Target:	AGO2
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This AGO2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	A synthesized peptide derived from human AGO2, corresponding to a region within N-terminal amino acids.
Isotype:	IgG
Specificity:	AGO2 Antibody detects endogenous levels of total AGO2.
Predicted Reactivity:	Pig,Zebrafish,Bovine,Horse,Sheep,Rabbit,Xenopus
Purification:	The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

Target Details

Target:	AGO2

Target Details

Alternative Name:	AGO2 (AGO2 Products)
Background:	Description: 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: AGO2
Molecular Weight:	90-95 kDa
Gene ID:	27161
UniProt:	Q9UKV8
Pathways:	Fc-epsilon Receptor Signaling Pathway, Regulatory RNA Pathways, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Ribonucleoprotein Complex Subunit Organization

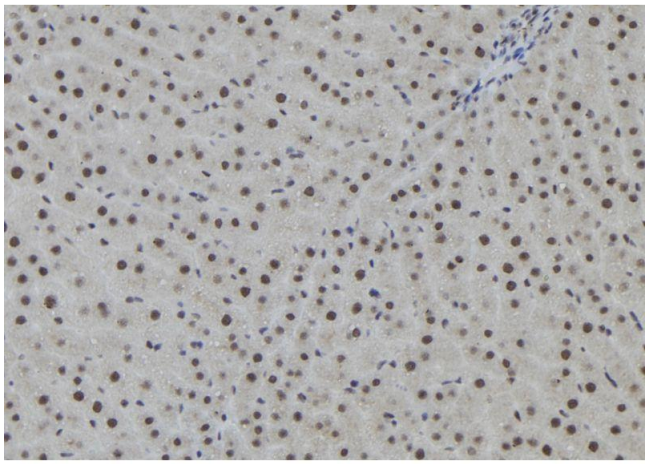
Application Details

Application Notes:	WB 1:500-1:2000, IHC 1:50-1:200
Restrictions:	For Research Use only

Handling

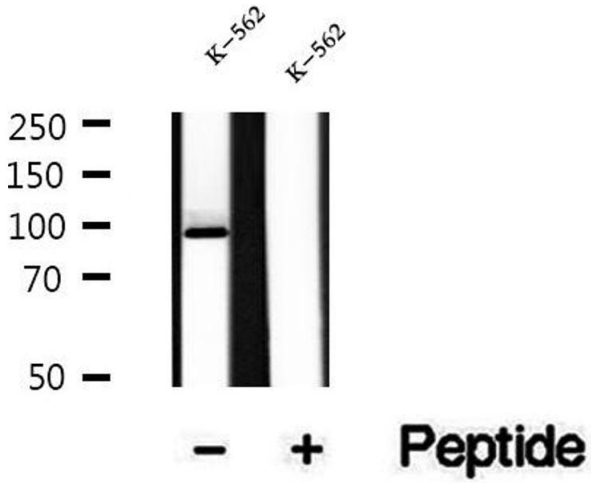
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.
Expiry Date:	12 months

Images



Immunohistochemistry

Image 1. ABIN6273090 at 1/100 staining Rat liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



Western Blotting

Image 2. Western blot analysis of extracts of K-562 cells, using AGO2 antibody.