

Anti-EIF2C1/AGO1 Picoband Antibody
Catalog # ABO10115**Specification**

Anti-EIF2C1/AGO1 Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	Q9UL18
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Protein argonaute-1(AGO1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-EIF2C1/AGO1 Picoband Antibody - Additional Information

Gene ID 26523

Other Names

Protein argonaute-1, Argonaute1, hAgo1, Argonaute RISC catalytic component 1, Eukaryotic translation initiation factor 2C 1, eIF-2C 1, eIF2C 1, Putative RNA-binding protein Q99, AGO1, EIF2C1

Calculated MW

97214 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm, P-body .

Protein Name

Protein argonaute-1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human EIF2C1/AGO1 (376-409aa EISRLMKNASYNLDPYIQEFGIKVKDDMTEVTGR), identical to the related mouse and rat sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-EIF2C1/AGO1 Picoband Antibody - Protein Information

Name AGO1

Synonyms EIF2C1

Function

Required for RNA-mediated gene silencing (RNAi). Binds to short RNAs such as microRNAs (miRNAs) or short interfering RNAs (siRNAs), and represses the translation of mRNAs which are complementary to them. Lacks endonuclease activity and does not appear to cleave target mRNAs. Also required for transcriptional gene silencing (TGS) of promoter regions which are complementary to bound short antigenic RNAs (agRNAs).

Cellular Location

Cytoplasm, P-body

Anti-EIF2C1/AGO1 Picoband Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

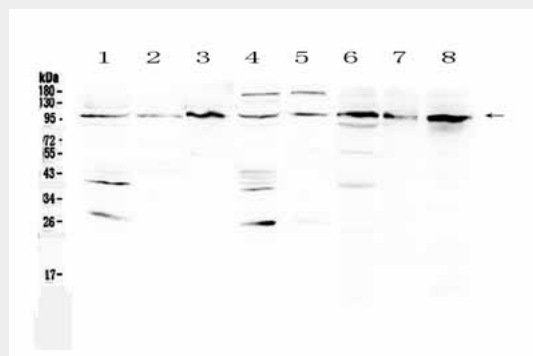
Anti-EIF2C1/AGO1 Picoband Antibody - Images

Figure 1. Western blot analysis of EIF2C1/AGO1 using anti- EIF2C1/AGO1 antibody (ABO10115). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: rat kidney tissue lysates, Lane 3: NRK whole Cell lysates, Lane 4: mouse brain tissue lysates, Lane 5: mouse kidney tissue lysates, Lane 6: HELA whole cell lysates, Lane 7: JURKAT whole cell lysates, Lane 8: K562 whole cell lysates, After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- EIF2C1/AGO1 antigen affinity purified polyclonal antibody (Catalog # ABO10115) at 0.5 μ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for EIF2C1/AGO1 at approximately 97KD. The expected band size for EIF2C1/AGO1 is at 97KD.

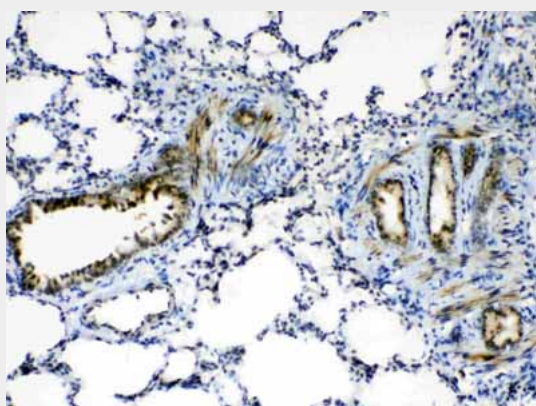


Figure 2. IHC analysis of EIF2C1/AGO1 using anti- EIF2C1/AGO1 antibody (ABO10115). EIF2C1/AGO1 was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- EIF2C1/AGO1 Antibody (ABO10115) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

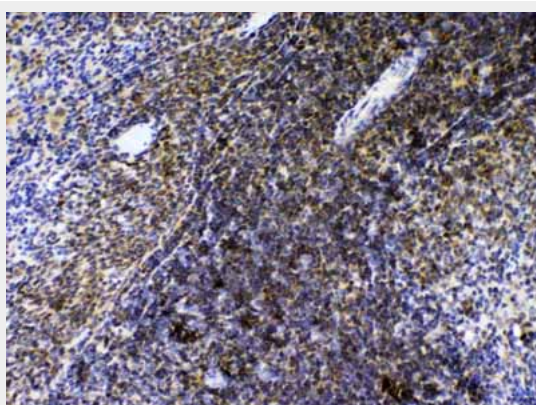


Figure 3. IHC analysis of EIF2C1/AGO1 using anti- EIF2C1/AGO1 antibody (ABO10115). EIF2C1/AGO1 was detected in paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- EIF2C1/AGO1 Antibody (ABO10115) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

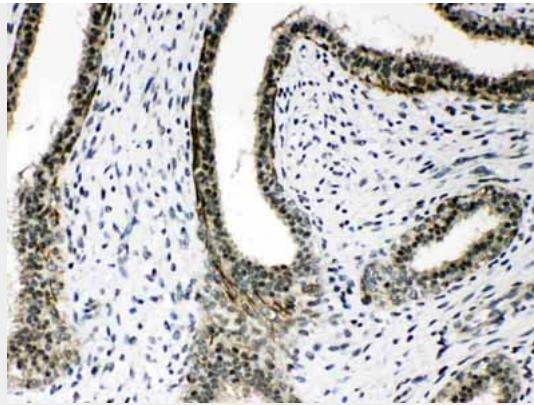


Figure 4. IHC analysis of EIF2C1/AGO1 using anti- EIF2C1/AGO1 antibody (ABO10115). EIF2C1/AGO1 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 μ g/ml rabbit anti- EIF2C1/AGO1 Antibody (ABO10115) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-EIF2C1/AGO1 Picoband Antibody - Background

This gene encodes a member of the argonaute family of proteins, which associate with small RNAs and have important roles in RNA interference (RNAi) and RNA silencing. This protein binds to microRNAs (miRNAs) or small interfering RNAs (siRNAs) and represses translation of mRNAs that are complementary to them. It is also involved in transcriptional gene silencing (TGS) of promoter regions that are complementary to bound short antigenic RNAs (agRNAs), as well as in the degradation of miRNA-bound mRNA targets. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. A recent study showed this gene to be an authentic stop codon readthrough target, and that its mRNA could give rise to an additional C-terminally extended isoform by use of an alternative in-frame translation termination codon.