

For Research Use Only

# AGO2 Monoclonal antibody

Catalog Number: 67934-1-Ig

Featured Product

5 Publications



## Basic Information

|   |   |  |
|---|---|--|
| <b>Catalog Number:</b><br>67934-1-Ig                          | <b>GenBank Accession Number:</b><br>BC007633                        | <b>Purification Method:</b><br>Protein G purification                |
| <b>Size:</b><br>150ul, Concentration: 2000 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>27161                                      | <b>CloneNo.:</b><br>1G2H12   |
| <b>Source:</b><br>Mouse                                       | <b>Full Name:</b><br>eukaryotic translation initiation factor 2C, 2 | <b>Recommended Dilutions:</b><br>WB 1:1000-1:5000<br>IHC 1:200-1:800 |
| <b>Isotype:</b><br>IgG1                                       | <b>Calculated MW:</b><br>97 kDa                                     |  |
| <b>Immunogen Catalog Number:</b><br>AG27772                   | <b>Observed MW:</b><br>90 kDa                                       |  |

## Applications

### Tested Applications:

IHC, WB, ELISA

### Cited Applications:

IP, RIP, WB

### Species Specificity:

Human, Mouse, Rat

### Cited Species:

human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** LNCaP cells, K-562 cells, 4T1 cells, HepG2 cells, HeLa cells, HEK-293 cells, MCF-7 cells

**IHC:** human pancreas cancer tissue, human urothelial carcinoma tissue

## Background Information

EIF2C2, also named as AGO2, belongs to the argonaute family and Ago subfamily. It is required for RNA-mediated gene silencing (RNAi) by the RNA-induced silencing complex (RISC). The 'minimal RISC' appears to include EIF2C2/AGO2 bound to a short guide RNA such as a microRNA (miRNA) or short interfering RNA (siRNA). EIF2C2 may inhibit translation initiation by binding to the 7-methylguanosine cap, thereby preventing the recruitment of the translation initiation factor eIF4-E. It also inhibits translation initiation via interaction with EIF6, which itself binds to the 60S ribosomal subunit and prevents its association with the 40S ribosomal subunit. EIF2C2 can also upregulate the translation of specific mRNAs under certain growth conditions.

## Notable Publications

| Author        | Pubmed ID | Journal                 | Application |
|---------------|-----------|-------------------------|-------------|
| Bingwei Yang  | 35349355  | Environ Health Perspect | RIP         |
| Shaoyan Cheng | 35246494  | J Immunol               | RIP         |
| Ting Peng     | 35695407  | J Med Chem              | WB,IP       |

## Storage

### Storage:

Store at -20°C.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

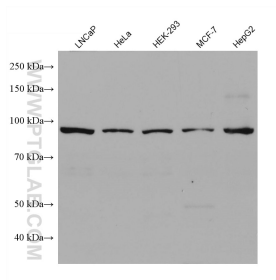
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

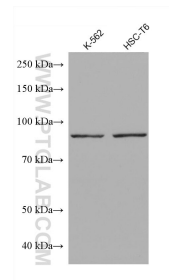
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

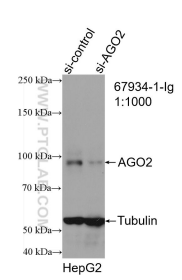
## Selected Validation Data



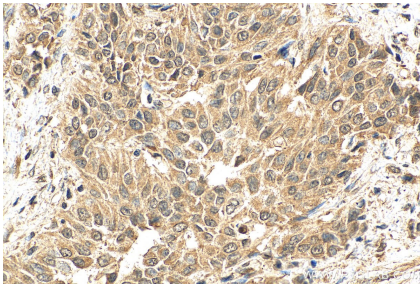
Various lysates were subjected to SDS PAGE followed by western blot with 67934-1-Ig (AGO2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



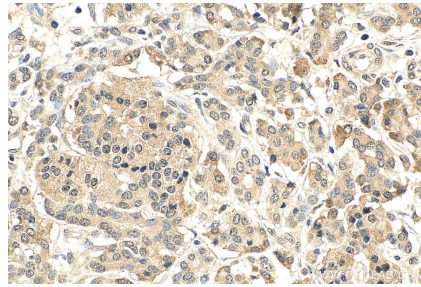
Various lysates were subjected to SDS PAGE followed by western blot with 67934-1-Ig (AGO2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



WB result of AGO2 antibody (67934-1-Ig; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AGO2 transfected HepG2 cells.



Immunohistochemical analysis of paraffin-embedded human urothelial carcinoma tissue slide using 67934-1-Ig (AGO2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 67934-1-Ig (AGO2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).