

For Research Use Only

# GNAO1 Polyclonal antibody

Catalog Number: 12635-1-AP

10 Publications



## Basic Information

### Catalog Number:

12635-1-AP

### Size:

150ul, Concentration: 450 ug/ml by Nanodrop and 220 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3330

### GenBank Accession Number:

BC030027

### GeneID (NCBI):

2775

### UNIPROT ID:

P09471

### Full Name:

guanine nucleotide binding protein (G protein), alpha activating activity polypeptide O

### Calculated MW:

302 aa, 35 kDa

### Observed MW:

40 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IP, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

WB : mouse brain tissue, Y79 cells, human liver tissue, mouse testis tissue, rat testis tissue, rat brain tissue

IP : mouse brain tissue,

IHC : human gliomas tissue,

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

## Background Information

GNAO1 gene encodes the  $\alpha$  subunit of heterotrimeric guanine nucleotide-binding protein (G $\alpha$  protein), a membrane protein widely expressed in the central nervous system involved in signal transduction (PMID: 30642806). GNAO1 belongs to the G- $\alpha$  family and G(i/o/t/z) subfamily. GNAO1 is highly expressed in brain and modulate neuronal excitability (PMID: 30838255). GNAO1 has 2 isoforms with the molecular mass of 40 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Meiling Du	34900204	J Healthc Eng	IHC
Jenna L Aumiller	36626984	J Biol Chem	WB, IF
Juan Zhen	26718829	Neurochem Res	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

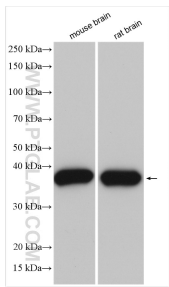
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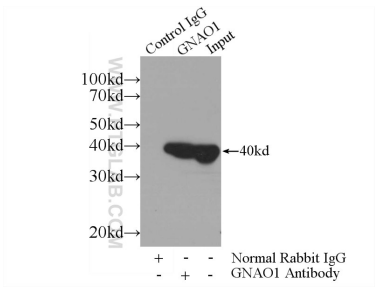
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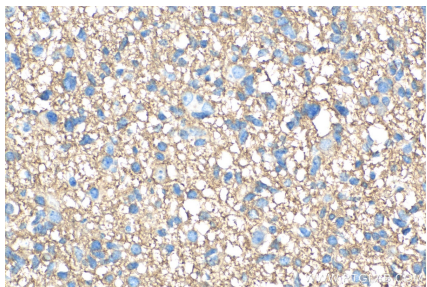
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 12635-1-AP (GNAO1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



IP result of anti-GNAO1 (IP:12635-1-AP, 3ug; Detection:12635-1-AP 1:600) with mouse brain tissue lysate 3600ug.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 12635-1-AP (GNAO1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).