

# GNAO1 Monoclonal antibody

Catalog Number: 68027-1-Ig

## Basic Information

Catalog Number:

68027-1-Ig

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG32045

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:

Protein G purification

CloneNo.:

1B5G2

Recommended Dilutions:

WB 1:5000-1:50000

IHC 1:1000-1:4000

IF-P 1:200-1:800

## Applications

Tested Applications:

IF-P, IHC, WB, ELISA

Species Specificity:

Mouse, Rat, Rabbit, Pig, Chicken, Human

**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 : pig brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue, chicken brain tissue, rat cerebellum tissue

IHC : human gliomas tissue,

IF-P : rat cerebellum tissue,

## Background Information

GNAO1 gene encodes the  $\alpha$  subunit of heterotrimeric guanine nucleotide-binding protein (Gi 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.

## Storage

Storage:

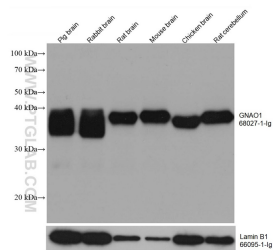
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

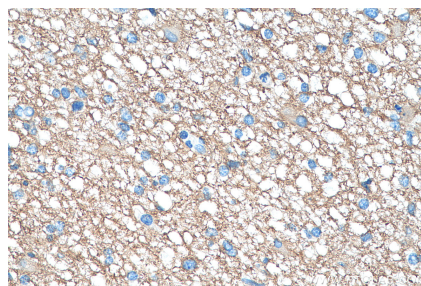
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

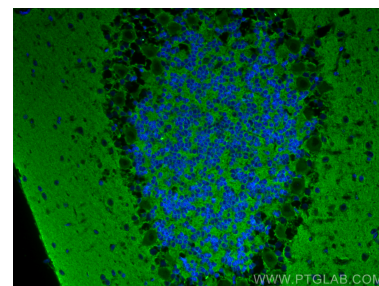
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68027-1-Ig (GNAO1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Lamin B1 Monoclonal antibody (66095-1-Ig) as loading control.



Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 68027-1-Ig (GNAO1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed rat cerebellum tissue using GNAO1 antibody (68027-1-Ig, Clone: 1B5G2) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).