

For Research Use Only

# GNAO1 Monoclonal antibody

Catalog Number: 68027-1-Ig



## Basic Information

<b>Catalog Number:</b> 68027-1-Ig	<b>GenBank Accession Number:</b> BC030027	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2775	<b>CloneNo.:</b> 1B5G2
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P09471	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:1000-1:4000 IF-P 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> guanine nucleotide binding protein (G protein), alpha activating activity polypeptide O	
<b>Immunogen Catalog Number:</b> AG32045	<b>Calculated MW:</b> 302 aa, 35 kDa	
	<b>Observed MW:</b> 40 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF-P, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> Mouse, Rat, Rabbit, Pig, Chicken, Human	<b>WB :</b> pig brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue, chicken brain tissue, rat cerebellum tissue
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> human gliomas tissue,
	<b>IF-P :</b> 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

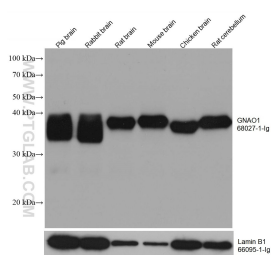
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

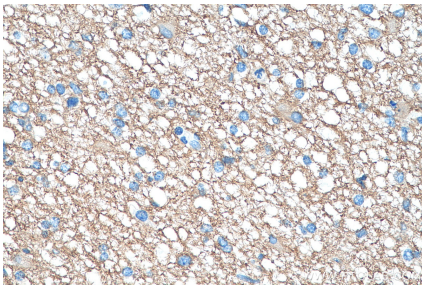
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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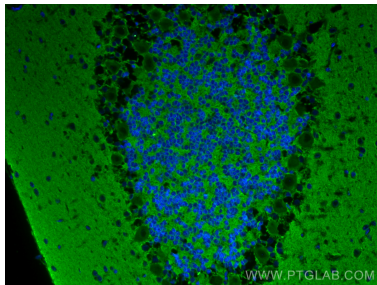
## Selected Validation Data



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).