

For Research Use Only

# GPR50 Polyclonal antibody

Catalog Number: 19762-1-AP

Featured Product

5 Publications



## Basic Information

<b>Catalog Number:</b> 19762-1-AP	<b>GenBank Accession Number:</b> NM_004224	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 1000 µg/ml by Nanodrop and 333 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 9248	<b>Recommended Dilutions:</b> IHC 1:20-1:200 IF 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> G protein-coupled receptor 50	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 67 kDa	

## Applications

<b>Tested Applications:</b> FC, IF, IHC, ELISA	<b>Positive Controls:</b> IHC : mouse brain tissue, IF : mouse brain tissue, SH-SY5Y cells
<b>Cited Applications:</b> IF, IP, WB	
<b>Species Specificity:</b> human, mouse	
<b>Cited Species:</b> human, mouse	
<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>	

## Background Information

GPR50, also known as Melatonin-related receptor or H9, is a member of the G-protein coupled receptor 1 family. It is closely related to the G protein-coupled melatonin receptor family and has been demonstrated as the mammalian ortholog of Mel1c receptor (PMID: 8647286; 18400093). GPR50 does not bind melatonin. It is able to heterodimerize with both the MT1 (Mel1a) and MT2 (Mel1b) melatonin receptor subtypes. While GPR50 has no effect on MT2 function, GPR50 prevented MT1 from both binding melatonin and coupling to G proteins. GPR50 is involved in neuroendocrine function and plays a role in the regulation of energy metabolism (PMID: 8647286; 17957037).

## Notable Publications

Author	Pubmed ID	Journal	Application
Danli Lu	36181629	Transl Stroke Res	WB,IP
Boris Simonetti	31576058	Nat Cell Biol	WB
Zhenyu Yao	36333974	FEBS Open Bio	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

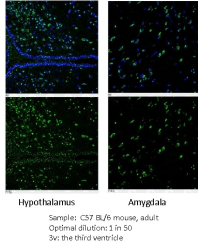
\*\*\* 20ul sizes contain 0.1% BSA

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.

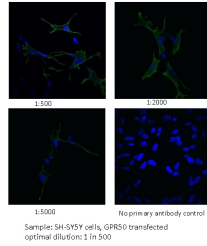
## Selected Validation Data

### Immunohistochemistry

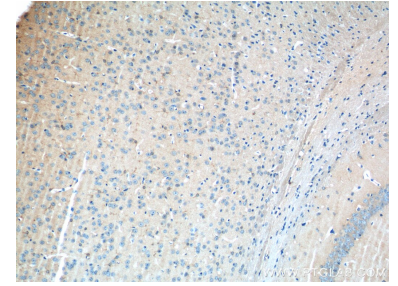


IF result of anti-GPR50 (19762-1-AP, 1:50) with mouse brain tissue slide by Dr. Qian Li, University of Edinburgh.

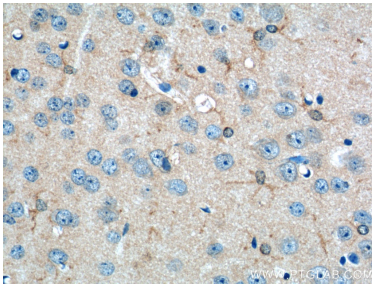
### Immunocytochemistry



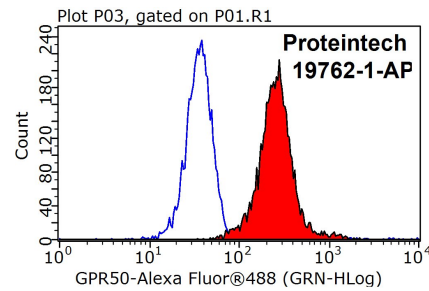
IF result of anti-GPR50 (19762-1-AP, 1:500) with SH-SY5Y cells transfected with GPR50 by Dr. Qian Li, University of Edinburgh.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19762-1-AP (GPR50 Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19762-1-AP (GPR50 Antibody) at dilution of 1:50 (under 40x lens).



1X10<sup>6</sup> K-562 cells were stained with 0.2ug GPR50 antibody (19762-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.