For Research Use Only

OPRL1 Polyclonal antibody

Catalog Number:12970-1-AP

Featured Product

4 Publications

BC038433

4987

P41146

GeneID (NCBI):

UNIPROT ID:

Full Name:

opiate receptor-like 1
Calculated MW:

GenBank Accession Number:



Basic Information

Catalog Number: 12970-1-AP Size:

500 µg/ml Source: Rabbit Isotype:

Immunogen Catalog Number: AG4079

4079

Observed MW: 45 kDa

370 aa, 41 kDa

Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:20-1:200

Applications

Tested Applications: FC, IHC, IP, WB, ELISA Cited Applications:

WB, IHC

Species Specificity: human, mouse, rat Cited Species: human, rat

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: HeLa cells, SH-SY5Y cells

IP: SH-SY5Y cells,

IHC : human gliomas tissue, mouse brain tissue

Background Information

The OPRL1 (opioid related nociceptin receptor 1) is the G-protein coupled receptor activated by the endogenou NC (neuropeptide nociceptin) (PMID:7566152). OPRL1 is widely expressed in the central nervous system, including the hippocampal dentate gyrus, cortical areas, striatum, thalamus, and hypothalamus (PMID:19501074). OPRL1 has been found to play an essential role in cognition, and to modulate inflammation and immune responses (PMID:30152845).

Notable Publications

Author	Pubmed ID	Journal	Application
Katarzyna Popiolek-Barczyk	25276817	Biomed Res Int	WB
Neili Xu	31865244	Int Immunopharmacol	WB,IHC
Anna Piotrowska	30076959	Biochim Biophys Acta	

Storage

Storage:

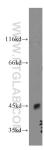
Store at -20°C. Stable for one year after shipment.

Storage Buffer

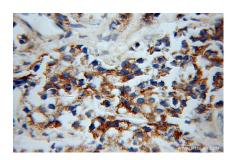
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

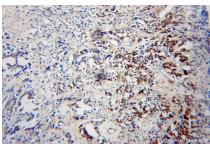
Selected Validation Data



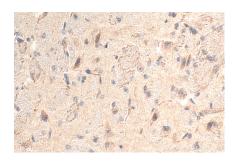
HeLa cells were subjected to SDS PAGE followed by western blot with 12970-1-AP (OPRL1 antibody) at dilution of 1:500 incubated at room temperature for



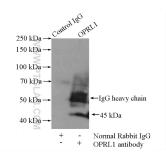
Immunohistochemical analysis of paraffinembedded human gliomas using 12970-1-AP (OPRL1 antibody) at dilution of 1:100 (under 40x lens)



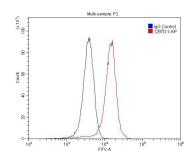
Immunohistochemical analysis of paraffinembedded human gliomas using 12970-1-AP (OPRL1 antibody) at dilution of 1:100 (under 10x lens)



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 12970-1-AP (OPRL1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-OPRL1 (IP:12970-1-AP, 4ug; Detection:12970-1-AP 1:500) with SH-SY5Y cells lysate 2000ug.



1X10^6 SH-SY5Y cells were stained with 0.2ug OPRL1 antibody (12970-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.