For Research Use Only

DRD1 Polyclonal antibody

Catalog Number:17934-1-AP Featured Product 15 Publications

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Basic Information

Catalog Number:
17934-1-AP

Size:
150ul , Concentration: 800 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG12366

GenBank Accession Number:
BC074978

GeneID (NCBI):
1812

Full Name:
dopamine receptor D1

Calculated MW:
446 aa, 49 kDa

Observed MW:
50-75 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:50-1:500
IF 1:50-1:500

Applications

Tested Applications:
IF, IHC, WB, ELISA

Cited Applications:
IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

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 : 37°C incubated mouse brain tissue,

IHC : mouse brain tissue, rat brain tissue

IF : mouse brain tissue,

Background Information

Dopamine is a neurotransmitter that plays a crucial role in physical and mental health, such as cardiovascular, hormonal, renal and central nervous systems (PMID: 29220802). Five subtypes of mammalian dopamine receptors are grouped into two classes, the D1- and D2-like classes. The D1-like class includes D1 and D5 receptors whereas the D2-like class includes D2, D3, D4 subtypes (PMID: 9457173). Dopamine receptor D1 (DRD1) is the most abundant form of dopamine receptor in the central nervous system. DRD1 stimulates adenylate cyclase, modulates D2 receptor activity, regulates neuron growth and differentiation, and mediates several behavioral responses (PMID: 1977312). DRD1 has a calculated molecular weight of 49 kDa, larger apparent molecular weight of 60-80 kDa may be due to glycosylation (PMID: 1281547; 23821371).

Notable Publications

Author	Pubmed ID	Journal	Application
Soheil Kazemi Roodsari	35625897	Biomedicines	WB
Kyungri Kim	33801790	Genes (Basel)	WB
Yiqing Yan	25594175	Cell	WB

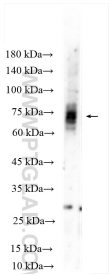
Storage

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

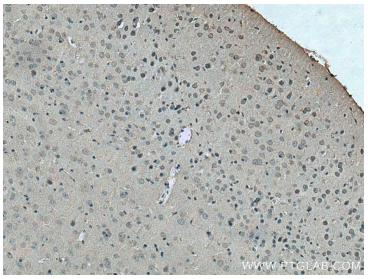
*** 20ul sizes contain 0.1% BSA

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

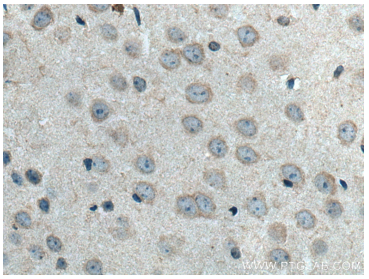
Selected Validation Data



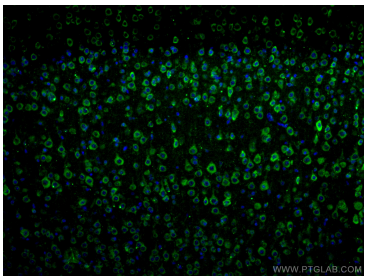
37°C incubated mouse brain tissue were subjected to SDS PAGE followed by western blot with 17934-1-AP (DRD1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



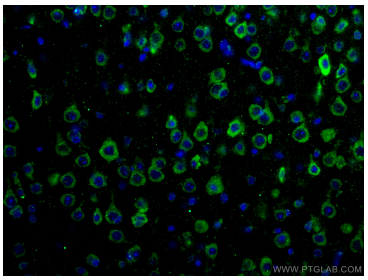
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 17934-1-AP (DRD1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



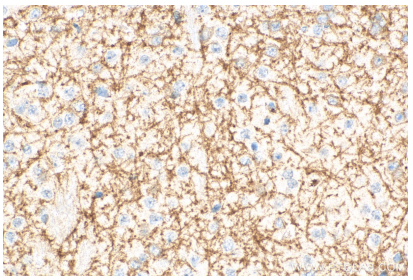
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 17934-1-AP (DRD1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DRD1 antibody (17934-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using DRD1 antibody (17934-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 17934-1-AP (DRD1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).