

DRD4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8760C

Specification

DRD4 Antibody (Center) - Product Information

Application FC, IHC-P, WB,E

Primary Accession P21917

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 365-391

DRD4 Antibody (Center) - Additional Information

Gene ID 1815

Other Names

D(4) dopamine receptor, D(2C) dopamine receptor, Dopamine D4 receptor, DRD4

Target/Specificity

This DRD4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 365-391 amino acids from the Central region of human DRD4.

Dilution

FC~~1:10~50 IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

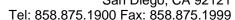
DRD4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

DRD4 Antibody (Center) - Protein Information

Name DRD4

Function Dopamine receptor responsible for neuronal signaling in the mesolimbic system of the







brain, an area of the brain that regulates emotion and complex behavior. Activated by dopamine, but also by epinephrine and norepinephrine, and by numerous synthetic agonists and drugs (PubMed:16423344, PubMed:27659709, PubMed:29051383, PubMed:9003072). Agonist binding triggers signaling via G proteins that inhibit adenylyl cyclase (PubMed:16423344, PubMed:27659709, PubMed:29051383, PubMed:7512953, PubMed:7643093). Modulates the circadian rhythm of contrast sensitivity by regulating the rhythmic expression of NPAS2 in the retinal ganglion cells (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

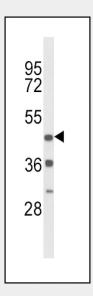
Highly expressed in retina. Detected at much lower levels in brain, in amygdala, thalamus, hypothalamus, cerebellum and pituitary.

DRD4 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

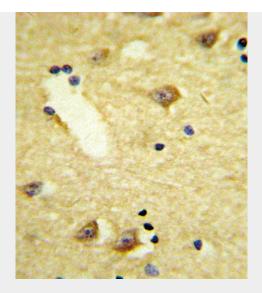
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

DRD4 Antibody (Center) - Images

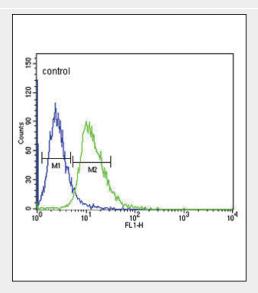


Western blot analysis of DRD4 Antibody (Center) (Cat. #AP8760c) in mouse heart tissue lysates (35ug/lane). DRD4 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human brain tissue reacted with DRD4 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



DRD4 Antibody (Center) (Cat. #AP8760c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

DRD4 Antibody (Center) - Background

DRD4 is the D4 subtype of the dopamine receptor. The D4 subtype is a G-protein coupled receptor which inhibits adenylyl cyclase. It is a target for drugs which treat schizophrenia and Parkinson disease.

DRD4 Antibody (Center) - References

Livingstone, C.D., et.al., Biochem. J. 287 (PT 1), 277-282 (1992) **DRD4 Antibody (Center) - Citations**

• Loss of cone cyclic nucleotide-gated channel leads to alterations in light response modulating system and cellular stress response pathways: a gene expression profiling study.



