

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





Tel: 858.875.1900 Fax: 858.875.1999

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

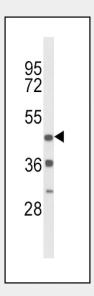
Highly expressed in retina. Detected at much lower levels in brain, in amygdala, thalamus, hypothalamus, cerebellum and pituitary.

DRD4 Antibody (Center) - Protocols

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

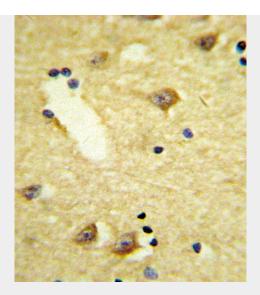
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

DRD4 Antibody (Center) - Images

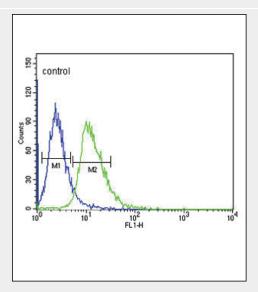


Western blot analysis of DRD4 Antibody (Center) (Cat. #AP8760c) in mouse heart tissue lysates (35ug/lane). DRD4 (arrow) was detected using the purified Pab.





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.



