

## D(1A) dopamine receptor (DRD1) Antibody

Catalog No: #48288

Package Size: #48288-1 50ul #48288-2 100ul

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## Description

Product Name	D(1A) dopamine receptor (DRD1) Antibody
Purification	Immunogen affinity purified
Applications	WB, IP, IF, IHC(P)
Species Reactivity	Hu, Ms, Rt
Immunogen Description	peptide
Other Names	D(1A) dopamine receptor antibody D1A dopamine receptor antibody DADR antibody Dopamine D1 receptor antibody dopamine receptor D1 antibody DR D1 antibody DR D1A antibody DRD 1 antibody DRD 1A antibody DRD1 antibody DRD1_HUMAN antibody DRD1A antibody
Accession No.	Swiss-Prot#:P21728
Calculated MW	74kDa
Concentration	1 mg/ml
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

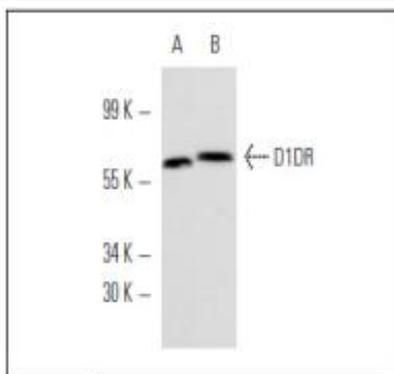
## Application Details

WB: 1:100-1:1,000

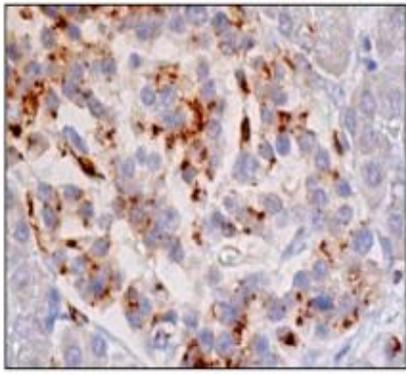
IHC: 1:50-1:500

IP: 1-2 &amp;mu;g per 100-500 &amp;mu;g of total protein (1 ml of cell lysate)

## Images



Western blot analysis of D1DR expression in KNRK (A) and HeLa (B) whole cell lysates.



Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of Islet of Langerhans.

## Background

The members of the G protein coupled receptor family are distinguished by their slow transmitting response to ligand binding. These transmembrane proteins include the adrenergic, serotonin and dopamine receptors. The effect of the signaling molecule can be excitatory or inhibitory depending on the type of receptor to which it binds.  $\alpha$ -adrenergic receptor binds to adrenaline activates adenylyl cyclase, while  $\beta$ -adrenergic receptor binds to adrenaline inhibits adenylyl cyclase. The dopamine receptors are divided into two classes, D1 and D2, which differ in their functional characteristics in that D1 receptors stimulate adenylyl cyclase while D2 receptors inhibit adenylyl cyclase activity. Five different subtypes of dopamine receptor have been described to date. D1DR and D5DR belong to the D1 subclass, while D2DR, D3DR and D4DR belong to the D2 subclass.

## References

1. Barak, L.S., et al. 1995. The conserved seven-transmembrane sequence NP(X)<sub>2</sub>3Y of the G protein-coupled receptor superfamily regulates multiple properties of the  $\beta$ 2-adrenergic receptor. *Biochem.* 34: 15407-15414.
2. Senogles, S.E. 1994. The D2 dopamine receptor isoforms signal through distinct Gi  $\alpha$  proteins to inhibit adenylyl cyclase. A study with site-directed mutant Gi  $\alpha$  proteins. *J. Biol. Chem.* 269: 23120-23127.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.