

D4DR Polyclonal Antibody

Catalog No: YT1278

Reactivity: Human; Mouse; Rat

Applications: WB;IF;ELISA

Target: D4DR

Fields: >>Neuroactive ligand-receptor interaction;>>Dopaminergic synapse

Gene Name: DRD4

Protein Name: D(4) dopamine receptor

P21917

P51436

Human Gene ld: 1815

Human Swiss Prot

Prot

No:

Mouse Gene ld: 13491

Mouse Swiss Prot

No:

Rat Gene ld: 25432

Rat Swiss Prot No: P30729

Immunogen: The antiserum was produced against synthesized peptide derived from human

DRD4. AA range:355-404

Specificity: D4DR Polyclonal Antibody detects endogenous levels of D4DR protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:40000. Not yet tested in other

applications.



Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 48kD

Cell Pathway: Neuroactive ligand-receptor interaction;

Background: This gene encodes 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. Mutations in this gene have been associated with various behavioral phenotypes, including autonomic nervous system dysfunction, attention deficit/hyperactivity disorder, and the personality trait of novelty seeking. This gene contains a polymorphic number (2-10 copies) of tandem 48 nt repeats; the sequence shown contains four repeats.

[provided by RefSeq, Jul 2008],

Function: function: This is one of the five types (D1 to D5) of receptors for dopamine. The

activity of this receptor is mediated by G proteins which inhibit adenylyl cyclase.,polymorphism:The number of repeats of 16 amino acids in the third cytoplasmic loop is highly polymorphic and varies among different alleles. Alleles corresponding in size to a 2 (D4.2), 3 (D4.3), 4 (D4.4), 5 (D4.5), 6 (D4.6), 7 (D4.7) and 9 (D4.9) repeats have been described. The sequence shown is that of allele D4.7. The polymorphic repeat sequence has little influence on DRD4-binding profiles and might not be essential for G protein interaction.,similarity:Belongs to the G-protein coupled receptor 1 family.,subunit:Interacts with CLIC6 (By

similarity) and GPRASP1.,

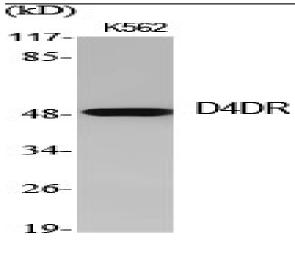
Subcellular Location :

Cell membrane; Multi-pass membrane protein.

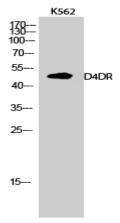
Expression: Highly expressed in retina. Detected at much lower levels in brain, in amygdala,

thalamus, hypothalamus, cerebellum and pituitary.

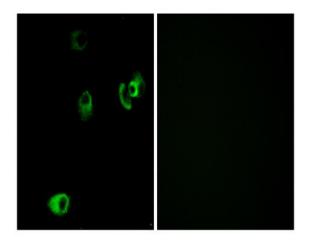
Products Images



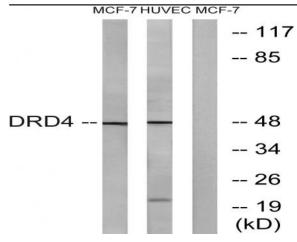
Western Blot analysis of various cells using D4DR Polyclonal Antibody



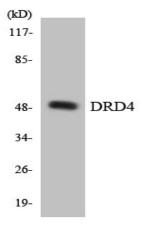
Western Blot analysis of K562 cells using D4DR Polyclonal Antibody



Immunofluorescence analysis of MCF7 cells, using DRD4 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from MCF-7 and HUVEC cells, using DRD4 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from RAW264.7cells using DRD4 antibody.