

# Anti-Dopamine Receptor D3 Antibody

Catalog # ABO10898

### Specification

# Anti-Dopamine Receptor D3 Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP35462HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for D(3) dopamine receptor(DRD3) detection. Tested with WB,IHC-P in Human;Mouse;Rat.Human;Mouse;Rat.

**Reconstitution** Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

# Anti-Dopamine Receptor D3 Antibody - Additional Information

Gene ID 1814

Other Names D(3) dopamine receptor, Dopamine D3 receptor, DRD3

Calculated MW 44225 MW KDa

**Application Details** Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Rat, Human, Mouse, By Heat<br>br>Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse<br>

### **Subcellular Localization**

Cell membrane ; Multi-pass membrane protein . Both membrane-bound and scattered in the cytoplasm during basal conditions. Receptor stimulation results in the rapid internalization and sequestration of the receptors at the perinuclear area (5 and 15 minutes), followed by the dispersal of the receptors to the membrane (30 minutes). DRD3 and GRK4 co- localize in lipid rafts of renal proximal tubule cells.

Tissue Specificity Brain.

**Protein Name** D(3) dopamine receptor

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen



A synthetic peptide corresponding to a sequence at the C-terminus of human Dopamine Receptor D3(352-367aa NTHCQTCHVSPELYSA), different from the related rat and mouse sequences by two amino acids.

**Purification** Immunogen affinity purified.

**Cross Reactivity** No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the G-protein coupled receptor 1 family.

## Anti-Dopamine Receptor D3 Antibody - Protein Information

### Name DRD3 (<u>HGNC:3024</u>)

#### Function

Dopamine receptor whose activity is mediated by G proteins which inhibit adenylyl cyclase. Promotes cell proliferation.

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Note=Both membrane-bound and scattered in the cytoplasm during basal conditions Receptor stimulation results in the rapid internalization and sequestration of the receptors at the perinuclear area (5 and 15 minutes), followed by the dispersal of the receptors to the membrane (30 minutes). DRD3 and GRK4 co-localize in lipid rafts of renal proximal tubule cells

Tissue Location Brain.

### Anti-Dopamine Receptor D3 Antibody - Protocols

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

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

Anti-Dopamine Receptor D3 Antibody - Images





Anti-Dopamine Receptor D3 antibody, ABO10898, IHC(P)IHC(P): Rat Brain Tissue



Anti-Dopamine Receptor D3 antibody, ABO10898, Western blottingLane 1: Rat Testis Tissue LysateLane 2: Rat Brain Tissue LysateLane 3: U87 Cell LysateLane 4: HELA Cell Lysate

# Anti-Dopamine Receptor D3 Antibody - Background

DRD3 is a dopamine receptor that differs in its pharmacology and signaling system from the D1 and D2 receptors and represents both an autoreceptor and a postsynaptic receptor. DRD3 is localized to limbic areas of the brain, which are associated with cognitive, emotional, and endocrine functions. The DRD3 gene, which is mapped to chromosome 3, is like the DRD2 gene but unlike most other members of this superfamily and it contains introns, 5 in number. The position of 2 of the introns corresponds to that of introns in DRD2. The D3 receptor appeared to mediate some of the effects of antipsychotic drugs and drugs used in the treatment of Parkinson disease, which were previously though to interact only with D2 receptors.