10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-DRD1 Antibody

Catalog # ABO10886

Product Information

Application	WB, IHC-P
Primary Accession	P21728
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for D(1A) dopamine receptor(DRD1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1812
Other Names	D(1A) dopamine receptor, Dopamine D1 receptor, DRD1
Calculated MW	49293
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Rat, Mouse, By Heat Western blot, 0.1-0.5 □g/ml, Human, Rat, Mouse
Subcellular Localization	Cell membrane ; Multi-pass membrane protein . Endoplasmic reticulum membrane ; Multi-pass membrane protein . Transport from the endoplasmic reticulum to the cell surface is regulated by interaction with DNAJC14. .
Tissue Specificity	Detected in caudate, nucleus accumbens and in the olfactory tubercle. .
Source	Eukaryota
Protein Name	D(1A) 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 in the middle region of human DRD1 (221-242aa AQKQIRRIAALERAAVHAKNCQ), different from the related rat and mouse sequences by one amino acid.
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.

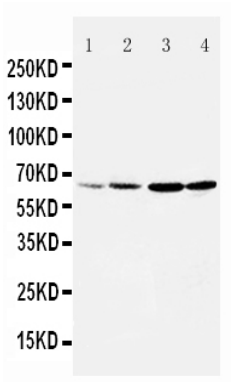
Protein Information

Name	DRD1
Function	Dopamine receptor whose activity is mediated by G proteins which activate adenylyl cyclase. Forms heterotetramers with DRD3 to potentiate beta-arrestin recruitment and mediate locomotor activity.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P18901}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P18901}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P18901}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P18901}. Cell projection, cilium membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:Q61616}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q61616}. Note=Transport from the endoplasmic reticulum to the cell surface is regulated by interaction with DNAJC14 {ECO:0000250|UniProtKB:P18901}
Tissue Location	Detected in caudate, nucleus accumbens and in the olfactory tubercle.

Background

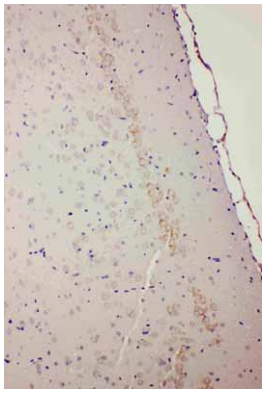
Dopamine receptor D1, also known as DRD1, is a human gene. It is the most highly expressed DA receptor subtype among the DA receptor family. Receptors for dopamine have been classified into two functional types, D1 and D2. They belong to the family of receptors acting through G(or guanine nucleotide-binding) proteins. D2 receptors inhibit adenylyl cyclase, but D1 receptors stimulate adenylyl cyclase and activate cyclic AMP-dependent protein kinases. Dopamine D1 and D2 receptors are targets of drug therapy in many psychomotor disorders, including Parkinson's disease and schizophrenia, and may also have a role in drug addiction and alcoholism. D1 receptors regulate neuron growth and differentiation, influence behaviour and modify dopamine D2 receptor-mediated events. And the presence of a D1 receptor gene restriction fragment length polymorphism will be helpful for future disease linkage studies. DRD1 also regulates the neurochemical architecture of the striatum and is critical for the normal expression of motor activity.

Images



Anti-DRD1 antibody, ABO10886, Western blottingLane 1: Rat Testis Tissue LysateLane 2: Rat Brain Tissue LysateLane 3: U87 Cell LysateLane 4: HELA Cell Lysate

Anti-DRD1 antibody, ABO10886, IHC(P)IHC(P): Rat Brain Tissue



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.