

Rabbit DRD4 Polyclonal Antibody | anti-DRD4 antibody

DRD4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326839	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

DRD4; Polyclonal Antibody; DRD4 Antibody; D(2C) dopamine receptor; D(4) dopamine receptor (D(2C) dopamine receptor); D(4) dopamine receptor; D4 dopamine receptor; D4DR; Dopamine D4 receptor; DRD 4; Drd4; DRD4_HUMAN; anti-DRD4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	DRD4 antibody detects endogenous levels of total DRD4
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	419
Applicable Applications for anti-DRD4 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide of human DRD4
Subcellular Location	Cell Membrane
Tissue Specificity	Highly expressed in retina. Detected at much lower levels in brain, in amygdala, thalamus, hypothalamus, cerebellum and pituitary.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA326839 staining MCF7 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA326839 at 1/100 staining Human liver cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)

Western blotanalysis of extracts of Mouse skeletal muscle tissue lysate, using DRD4antibody.
The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-DRD4 antibody	Description: 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. Function: Dopamine receptor responsible for neuronal signaling in the mesolimbic system of the 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:9003072, PubMed:16423344, PubMed:27659709, PubMed:29051383). Agonist binding triggers signaling via G proteins that inhibit adenylyl cyclase (PubMed:7512953, PubMed:7643093, PubMed:16423344, PubMed:27659709, PubMed:29051383). Modulates the circadian rhythm of contrast sensitivity by regulating the rhythmic expression of NPAS2 in the retinal ganglion cells (By similarity). Subunit Structure: Forms homo-and heterooligomers with DRD2. D4.7 allele exhibits higher affinity for homodimers compared to DRD2 heterodimers, while alleles D4.2 and 4.4 have similar affinities for both. The interaction with DRD2 may modulate agonist-induced downstream signaling (PubMed:21184734). Interacts with CLIC6 (By similarity). Interacts with GPRASP1 (PubMed:12142540). May interact with ADORA2A (PubMed:20836733). Interacts with KLHL12 (PubMed:18303015). Post-translational Modifications: Polyubiquitinated by the BCR(KLHL12) E3 ubiquitin ligase complex: polyubiquitination does not lead to degradation of DRD4 protein. Palmitoylated. Palmitoylation of the C-terminal Cys is important for normal expression at the cell membrane. Similarity: Belongs to the G-protein coupled receptor 1 family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	32483397
NCBI GeneID	1815
NCBI Accession #	NP_000788.2
NCBI GenBank Nucleotide #	NM_000797.3
UniProt Accession #	P21917; Q7Z7Q5; Q8NGM5; B0M0J7
Molecular Weight	Observed: 48 kDa Predicted: 49 kDa
NCBI Official Full Name	D(4) dopamine receptor
NCBI Official Synonym Full Names	dopamine receptor D4
NCBI Official Symbol	DRD4
NCBI Official Synonym Symbols	D4DR
NCBI Protein Information	D(4) dopamine receptor
UniProt Protein Name	D(4) dopamine receptor
UniProt Gene Name	DRD4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

