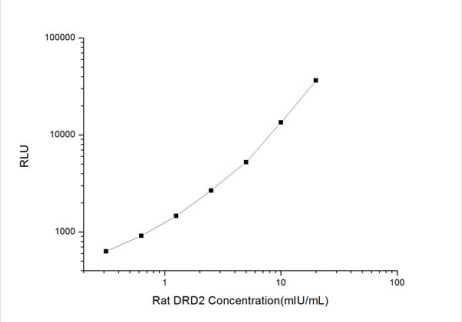
DRD2 (Dopamine Receptor D2) (DRD2) CLIA Kit for Rat

PRODUCT OVERVIEW

Product Name	DRD2 (Dopamine Receptor D2), CLIA Kit
Full Product Name	Rat DRD2 (Dopamine Receptor D2) CLIA Kit
Product Gene Name	DRD2 clia kit
Species Reactivity	Rat
Assay Type	Sandwich
Detection Range	0.313-20mIU/mL
Sensitivity	Min: 0.188mIU/mL; Max: 20mIU/mL
Specificity	This kit recognizes natural and recombinant DRD2. No significant cross-reactivity or interference between DRD2 and analogues was observed.
Molecular Weight	50,847 Da
OMIM	103780
3D Structure	ModBase 3D Structure for P14416
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for DRD2 clia kit	Intended Uses: This CLIA kit applies to the in vitro quantitative determination of DRD2 concentrations in serum, plasma and other biological fluids. Principle of the Assay: This kit uses Sandwich-CLIA as the method. The micro CLIA plate provided in this kit has been pre-coated with an antibody specific to DRD2. Standards or samples are added to the appropriate micro CLIA plate wells and combined with the specific antibody. Then a biotinylated detection antibody specific for DRD2 and Avidin-Horseradish Peroxidase (HRP) conjugate is added to each micro plate well successively and incubated. Free components are washed away. The substrate solution is added to each well. Only those wells that contain DRD2, biotinylated detection antibody and Avidin-HRP conjugate will appear fluorescence. The Relative light unit (RLU) value is measured spectrophotometrically by the Chemiluminescence immunoassay analyzer. The RLU value is positively associated with the concentration of DRD2. You can calculate the concentration of DRD2 in the samples by comparing the RLU value of the samples to the standard curve.
Other Notes	Small volumes of DRD2 clia kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for DRD2 purchase	MBS2531220 is a CLIA kit targeting DRD2. Also known as Rat DRD2 (Dopamine Receptor D2) CLIA Kit. Reactive in Rat.



Typical Testing Data/Standard Curve (for reference only) of DRD2 clia kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for DRD2. It may not necessarily be applicable to this product.

NCBI GI #	5921480
NCBI GeneID	1813
NCBI Accession #	CAB56463.1
UniProt Primary Accession #	P14416
UniProt Secondary Accession #	Q9NZR3; Q9UPA9
UniProt Related Accession #	P14416
NCBI Official Full Name	dopamine receptor D2
NCBI Official Synonym Full Names	dopamine receptor D2
NCBI Official Symbol	DRD2
NCBI Official Synonym Symbols	D2R; D2DR
UniProt Protein Name	D(2) dopamine receptor
UniProt Synonym Protein Names	Dopamine D2 receptor
Protein Family	D(2) dopamine receptor
UniProt Gene Name	DRD2
UniProt Entry Name	DRD2_HUMAN
NCBI Protein Information	D(2) dopamine receptor
NCBI Summary for DRD2	This gene encodes the D2 subtype of the dopamine receptor. This G-protein coupled receptor inhibits adenylyl cyclase activity. A missense mutation in this gene causes myoclonus dystonia; other mutations have been associated with schizophrenia. Alternative splicing of this gene results in two transcript variants encoding different isoforms. A third variant has been described, but it has not been determined whether this form is normal or due to aberrant splicing. [provided by RefSeq, Jul 2008]

UniProt Comments for DRD2	DRD2: Dopamine receptor whose activity is mediated by G proteins which inhibit adenylyl cyclase. Defects in DRD2 are associated with dystonia type 11 (DYT11); also known as alcohol-responsive dystonia. DYT11 is a myoclonic dystonia. Dystonia is defined by the presence of sustained involuntary muscle contractions, often leading to abnormal postures. DYT11 is characterized by involuntary lightning jerks and dystonic movements and postures alleviated by alcohol. Inheritance is autosomal dominant. The age of onset, pattern of body involvement, presence of myoclonus and response to alcohol are all variable. Belongs to the G-protein coupled receptor 1 family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, multi-pass; GPCR, family 1; Membrane protein, integral; Receptor, GPCR Chromosomal Location of Human Ortholog: 11q23 Cellular Component: synaptic vesicle membrane; nonmotile primary cilium; integral to plasma membrane; postsynaptic density; dendrite; dendritic spine; acrosome; perikaryon; cytosol; endocytic vesicle; axon; plasma membrane; nerve terminal; intracellular; lateral plasma membrane Molecular Function: dopamine D2 receptor-like receptor activity; identical protein binding; ionotropic glutamate receptor binding; protein binding; protein homodimerization activity; potassium channel regulator activity; adrenoceptor activity; protein heterodimerization activity; dopamine binding; drug binding Biological Process: response to nicotine; elevation of cytosolic calcium ion concentration during G-protein signaling, coupled to IP3 second messenger (phospholipase C activating); prepulse inhibition; positive regulation of dopamine uptake; response to toxin; positive regulation of receptor internalization; positive regulation of multicellular organism growth; thermoregulation; regulation of phosphoprotein phosphatase activity; dopamine metabolic process; adult walking behavior; negative regulation of insulin secretion; dopamine receptor, adenylate cyclase inhibiting pathway; protein localization; negative regulation of innate immune response; negative regulation of blood pressure; phosphatidylinositol metabolic process; response to drug; positive regulation of neuroblast proliferation; response to inactivity; response to light stimulus; cerebral cortex GABAergic interneuron migration; negative regulation of synaptic transmission, glutamatergic; regulation of sodium ion transport; arachidonic acid secretion; regulation of synaptic transmission, GABAergic; positive regulation of growth hormone secretion; G-protein coupled receptor internalization; reduction of cytosolic calcium ion concentration; activation of protein kinase activity; positive regulation of transcription from RNA polymerase II promoter; regulation of long-term neuronal synaptic plasticity; synaptic transmission, dopaminergic; peristalsis; branching morphogenesis of a nerve; negative regulation of circadian sleep/wake cycle, sleep; response to morphine; locomotory behavior; behavioral response to ethanol; orbitofrontal cortex development; regulation of dopamine secretion; negative regulation of cell proliferation; synaptogenesis; behavioral response to cocaine; visual learning; adenohypophysis development; nerve-nerve synaptic transmission; feeding behavior; circadian regulation of gene expression; response to axon injury; negative regulation of dopamine secretion; negative regulation of cell migration; response to iron ion; associative learning; positive regulation of cytokinesis; grooming behavior; negative regulation of protein secretion; negative regulation of protein kinase B signaling cascade; Wnt receptor signaling pathway; striatum development; regulation of cAMP metabolic process; regulation of potassium ion transport; regulation of heart rate; response to amphetamine; negative regulation of adenylate cyclase activity; sensory perception of smell; regulation of dopamine uptake; auditory behavior; response to cocaine; cellular calcium ion homeostasis; regulation of systemic arterial blood pressure by neurological process; negative regulation of dopamine receptor signaling pathway; axonogenesis; long-term memory; pigmentation; release of sequestered calcium ion into cytosol; positive regulation of G-protein coupled receptor protein signaling pathway; response to hypoxia; regulation of synapse structural plasticity; dopamine receptor, phospholipase C activating pathway Disease: Myoclonic Dystonia
Research Articles on DRD2	**1.** rs1801028 locus of DRD2 may be associated with schizophrenia (Meta-Analysis)
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