

Product datasheet for **RC210389**

Dopamine Receptor D1 (DRD1) (NM_000794) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dopamine Receptor D1 (DRD1) (NM_000794) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dopamine Receptor D1
Synonyms:	DADR; DRD1A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC210389 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAGGACTCTGAACACCTCTGCCATGGACGGGACTGGGCTGGTGGTGGAGAGGGACTTCTCTGTTCGTA
 TCCTCACTGCCTGTTTCCTGTCGCTGCTCATCCTGTCCACGCTCCTGGGGAACACGCTGGTCTGTGCTGC
 CGTTATCAGGTTCCGACACCTGCGGTCCAAGGTGACCAACTTCTTTGTCATCTCCTTGGCTGTGTAGAT
 CTCTTGGTGGCCGCTCTGGTTCATGCCCTGGAAGGCAGTGGCTGAGATTGCTGGCTTCTGGCCCTTTGGGT
 CCTTCTGTAACATCTGGGTGGCCTTTGACATCATGTGCTCCACTGCATCCATCCTCAACCTCTGTGTGAT
 CAGCGTGGACAGGTATTGGGCTATCTCCAGCCCTTCCGGTATGAGAGAAAGATGACCCCAAGGCAGCC
 TTCATCCTGATCAGTGTGGCATGGACCTGTCTGTACTCATCTCCTTCATCCCAGTGCAGCTCAGCTGGC
 ACAAGGCAAAACCCACAAGCCCTCTGATGAAATGCCACTTCCCTGGCTGAGACCATAGACAACCTGTGA
 CTCAGCCTCAGCAGGACATATGCCATCTCATCTCTGTAATAAGCTTTTACATCCTGTGGCCATCATG
 ATTGTCACCTACACCAGGATCTACAGGATTGCTCAGAAACAAATACGGCGCATTGCGGCCTTGGAGAGGG
 CAGCAGTCCACGCCAAGAATTGCCAGACCACCAGGTAATGGAAGCCTGTCAATGTTCTCAACCCGGA
 AAGTTCTTTAAGATGTCCTTCAAAGAGAAAATAAAGTCTGAAGACTCTGTGGTGTATCATGGGTGTG
 TTTGTGTGCTGTTGGCTACCTTCTTCACTTGAAGTGCATTTTGCCTTCTGTGGGTCTGGGGAGACGC
 AGCCCTTCTGCATTGATTCCAACACCTTGGACGTGTTGTGTGGTTTGGTGGGTAATTCATCCTTGAA
 CCCCATCATTTATGCCTTAAATGCTGATTTTCGGAAGGCATTTTCAACCTCTTAGGATGCTACAGACTT
 TGCCCTGCGACGAATAATGCCATAGAGACGGTGAATCAATAACAATGGGGCCGCGATGTTTTCCAGCC
 ATCATGAGCCACGAGGCTCCATCTCAAGGAGTCAATCTGGTTTACCTGATCCACATGCTGTGGGCTC
 CTCTGAGGACCTGAAAAAGGAGGAGGCAGCTGGCATCGCCAGACCTTGGAGAAGCTGTCCCAGCCCTA
 TCGGTCATATTGACTATGACACTGACGTCTCTGAGAGAAGATCCAACCCATCACAAAAACGGTCAGC
 ACCCAACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210389 protein sequence
 Red=Cloning site Green=Tags(s)

MRTLNTSAMDGTGLVVERDFSVRILTACFLSLLILSTLLGNTLVCAAVIRFRHLRSKVTNFFVISLAVSD
 LLVAVLVMPWKAVAEIAGFWPFGSFCNIWVAFDIMCSTASILNLCVISVDRYWAISSPFRYERKMTPKAA
 FILISVAWTLVLSIFIPVQLSWHKAKPTSPSDGNATSLAETIDNCDSSLRTYAISSSVISFYIPVAIM
 IVTYTRIVRIAQKQIRRIAALERA AVHAKNCQTTTNGKPV ECSQPESSFKMSFKRETKVLKTL SVIMGV
 FVCCWLPFFILNCILPFCGSGETQPF CIDSNTFDVFWFGWANS LNPIIYAFNADFRKAFSTLLGCYRL
 CPATNNAIETVSINNGAAMFSSHHEPRGSI SKECNLVYLIPHAVGSS EDLKKEEAAGIARPLEKLSPAL
 SVILDYDTHVSLEKIQPI TQNGQHPT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6007_d08.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_000794

ORF Size: 1338 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000794.5](#)

RefSeq Size: 3373 bp

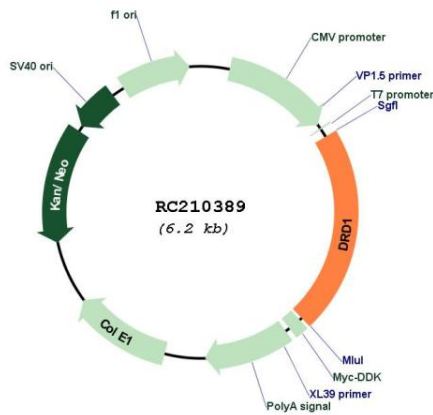
RefSeq ORF: 1341 bp

Locus ID: 1812

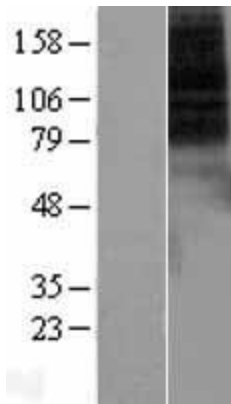
UniProt ID: [P21728](#)
 Cytogenetics: 5q35.2
 Domains: 7tm_1
 Protein Families: Druggable Genome, GPCR, Transmembrane
 Protein Pathways: Calcium signaling pathway, Gap junction, Neuroactive ligand-receptor interaction
 MW: 49.3 kDa

Gene Summary: This gene encodes the D1 subtype of the dopamine receptor. The D1 subtype is the most abundant dopamine receptor in the central nervous system. This G-protein coupled receptor stimulates adenylyl cyclase and activates cyclic AMP-dependent protein kinases. D1 receptors regulate neuronal growth and development, mediate some behavioral responses, and modulate dopamine receptor D2-mediated events. Alternate transcription initiation sites result in two transcript variants of this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210389



Western blot validation of overexpression lysate (Cat# [LY400273]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210389 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).