

Product datasheet for RC219722

Dopamine Receptor D4 (DRD4) (NM_000797) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dopamine Receptor D4 (DRD4) (NM_000797) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dopamine Receptor D4
Synonyms:	D4DR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219722 representing NM_000797 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAACCGCAGCACCGCGGACGCGGACGGGCTGCTGGCTGGGCGGGCCGGCCGGGGGCATCTG
CGGGGGCATCTGCGGGGCTGGCTGGGCAGGGCGCGCGGCGCTGGTGGGGGGCTGCTGCTCATCGGCGC
GGTGTCTCGGGGAACTCGCTCGTGTGCGTGAGCGTGGCCACCGAGCGCCCTGCAGACGCCACCAAC
TCCTTCATCGTGAGCCTGGCGGCCCGACCTCCTCCTCGCTCTCCTGGTGTCCGCTCTTCGTCTACT
CCGAGGTCAGGGTGGCGGTGGCTGCTGAGCCCCCGCTGTGCGACGCCCTCATGGCCATGGACGTCAT
GCTGTGCACCGCCTCCATCTTCAACCTGTGCGCCATCAGCGTGGACAGGTTCTGGCCGTGGCCGTGCCG
CTGCGCTACAACCGGCAGGGTGGGAGCCCGGCAGCTGCTGCTCATCGGCGCCAGTGGCTGCTGTCCG
CGGCGGTGGCGGCGCCCGTACTGTGCGGCCTCAACGACGTGCGCGGCCGCGACCCCGCCGTGTGCCGCT
GGAGGACCGGACTACGTGGTCTACTCGTCCGTGTGCTCCTTCTTCTACCTGCCCGCTCATGTGCTG
CTTACTGGGCCACGTTCCGCGGCTGCAGCGCTGGGAGGTGGCAGTGCAGCAAGCTGCAGCGCCGCG
CGCCCCGCGACCCAGCGGCCCTGGCCCGCTTCCCCACGCCACCCGCGCCCGCCCTCCCCAGGACCC
CTGGCGCCCGACTGTGCGCCCCCGCGCCCGGCTTCCCCGGGTCCCTGCGGCCCGACTGTGCGCC
GCCGCGCCAGCCTCCCCAGGACCCCTGCGGCCCGACTGTGCGCCCCCGCGCCCGCCCTCCCCCGG
ACCCCTGCGGCTCCAACGTGTGCTCCCCCGACGCGTCAAGAGCCGCGCTCCACCCAGACTCCACC
GCAGACCCGAGGAGCGCGTGCACAGATCACCGGCCGGAGCGCAAGGCCATGAGGGTCTGCCGGT
GTGGTCCGGGCTTCTGCTGTGCTGGACGCCCTTCTTGTGGTGCACATCACGAGGCGCTGTGCTCTG
CCTGCTCCGTGCCCGCGGCTGGTCAAGCGCCGTACCTGGTGGGTACGTCAACAGCGCCCTCAACCC
CGTCACTACTGTCTTCAACGCCGAGTCCGCAACGTCTTCCGCAAGGCCCTGCGTGCCTGCTGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTAA



Protein Sequence: >RC219722 representing NM_000797
 Red=Cloning site Green=Tags(s)

MGNRSTADADGLLAGRPAAGASAGASAGLAGQGAAALVGGVLLIGAVLAGNSLVCVSVATERALQTPTN
 SFIVSLAADLLLALLVLPLFVYSEVQGGAWLLSPRLCDALMAMDVMLCTASIFNLCAISVDRFVAVAVP
 LRYNRQGGSRRLQLLLIGATWLLSAVAAPVLCGLNDVGRDPAVCRLEDRDYVVYSSVCSFFLPCPLMLL
 LYWATFRGLQRWEVARRAKLHGRAPRRPSGPGPPSPTPPAPRLQDPCGPDPCAPPAPGLPRGPCGPDPCAP
 AAPSLPQDPCGPDPCAPPAPGLPPDPCGSNCAPPDAVRAAALPPQTPPQTRRRRRRAKITGREKAMRVLVY
 VYGAFLLCWTPFFVWHITQALCPACSVPPRLVSAVTWLGYNVNSALNPVIYTVFNAEFRNVFRKALRACC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_000797

ORF Size: 1257 bp

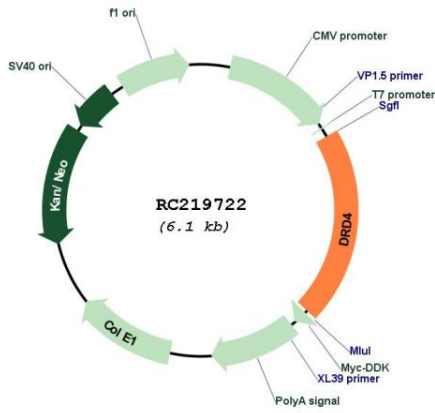
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none">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.
RefSeq:	<u>NM_000797.4</u>
RefSeq Size:	1378 bp
RefSeq ORF:	1260 bp
Locus ID:	1815
UniProt ID:	<u>P21917</u>
Cytogenetics:	11p15.5
Protein Families:	Druggable Genome, GPCR, Transmembrane
Protein Pathways:	Neuroactive ligand-receptor interaction
MW:	44.4 kDa
Gene Summary:	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. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC219722