

Product datasheet for **RG219466**

Dopamine Transporter (SLC6A3) (NM_001044) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dopamine Transporter (SLC6A3) (NM_001044) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dopamine Transporter
Synonyms:	DAT; DAT1; PKDYS; PKDYS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219466 representing NM_001044
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAGTAAGAGCAAATGCTCCGTGGGACTCATGTCTTCCGTGGTGGCCCCGGCTAAGGAGCCCAATGCCG
 TGGGCCGGAAGGAGGTGGAGCTCATCCTTGTCAAGGAGCAGAACGAGTGCAGCTACCAGCTCCACCCT
 CACCAACCCGCGGAGAGCCCGTGGAGGCCAGGATCGGGAGACCTGGGCAAGAAGATCGACTTTCTC
 CTGTCCGTATTGGCTTTGCTGTGGACCTGGCCAACTGTGGCGTTCCCTACCTGTGTACAAAAATG
 GTGGCGGTGCCTTCTGGTCCCCTACCTGCTTTCATGGTCATTGCTGGGATGCCACTTTTCTACATGGA
 GCTGGCCCTCGGCCAGTTC AACAGGGAAGGGGCCGCTGGTGTCTGGAAGATCTGCCCCATACTGAAAGGT
 GTGGGCTTACGGTCATCCTCATCTCACTGTATGTCGGCTTCTTACAACGTCATCATCGCTGGGCGC
 TGCATATCTTCTCCTCCTTACCACGGAGCTCCCCTGGATCCACTGCAACAACCTCTGGAACAGCCC
 CAACTGCTCGGATGCCATCCTGGTGTGACTCCAGTGGAGACAGCTCGGGCCTCAACGACACTTTTGGGACC
 ACACCTGCTGCCGAGTACTTTGAACGTGGCGTGTGCACCTCCACCAGAGCCATGGCATCGACGACTGG
 GGCTCCGCGGTGGCAGCTCACAGCCTGCCTGGTGTGCTGGTGCATCGTGTGCTCTACTTCAGCCTCTGGAA
 GGGCGTGAAGACCTCAGGGAAGGTGGTATGGATCACAGCCACCATGCCATACGTGGTCTCACTGCCCTG
 CTCCTGCGTGGGGTACCCTCCCTGGAGCCATAGACGGCATCAGAGCATACTGAGCGTTGACTTCTACC
 GGCTCTGCGAGGGCTCTGTTGGATTGACGCGGCCACCCAGGTGTGCTTCTCCCTGGGCGTGGGGTTCGG
 GGTGCTGATCGCCTTCTCAGCTACAACAAGTTCACCAACAACGCTACAGGGACGCGATTGTACCACC
 TCCATCAACTCCCTGACGAGCTTCTCCTCCGGCTTCGTCGTCTTCTCCTTCTGGGGTACATGGCAGAGA
 AGCAGAGTGTGCCATCGGGGACGTGGCAAGGACGGGCCAGGGGTGATTTTCATCATCTACCCGGAAGC
 CATCGCCACGCTCCCTCTGTCTCAGCTGAGCCGCGTGGTCTTCTCATCATGCTGCTCACCTGGGTATC
 GACAGCGCCATGGTGGTATGGAGTCACTGATCACCGGGCTCATCGATGATTCCAGCTGCTGCACAGAC
 ACCGTGAGCTCTTACGCTCTTTCATCGTCTGGCGACCTTCTCCTGTCCCTGTTCTGCGTCAACACGG
 TGGCATCTACGTCTTACGCTCTGGACATTTTGCAGCCGGCACGTCCATCCTCTTTGGAGTGTCTATC
 GAAGCCATCGGAGTGGCCTGTTCTATGGTGTGGGAGTTCAGCGACGACATCCAGCAGATGACCGGGC
 AGCGGCCAGCCTGTACTGGCGGTGTGCTGGAAGCTGGTCAAGCCCTGCTTCTCCTGTTGTTGCTGCT
 GGTGAGCATTGTGACCTCAGACCCCCCACTACGGAGCCTACATCTTCCCGACTGGGCCAACCGCGCTG
 GGCTGGGTGATCGCCACATCCTCCATGGCCATGGTGGCCATCTATGCGGCCTACAAGTCTGACGCTGC
 CTGGGTCTTTTCGAGAGAACTGGCCTACGCCATTGCACCCGAGAAGGACCGTGAGCTGGTGGACAGAGG
 GGAGGTGCGCCAGTTCACGCTCCGCCACTGGCTCAAGGTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG219466 representing NM_001044
 Red=Cloning site Green=Tags(s)

MSKSKCSVGLMSSVVPAPKEPNAVGPKEVELILVKEQNGVQLTSSTLTNPRQSPVEAQDRETWGKIDFL
 LSVIGFAVDLANVWRFPYLYKNGGGAFVLPYLLFMVIAGMPLFYMELALGQFNREGAAGVWKICPILKG
 VGFTVILISLYVGFYFNVI IAWALHYLFSFTELPIWHCNSWNSPNCSDAHPGDSSGSSGLNDTFTGT
 TPAAEYFERGVLHLHQSHGIDDLGPPRWQLTACLVLVIVLLYFSLWKGVKTSKGVVWITATMPYVLTAL
 LLRGVTLPGAIDGIRAYLSVDFYRLCEASVWIDAATQVCFSLGVGFGVLIAFSSYNKFTNNCYRDAIVTT
 SINSLTSFSSGFVVFSLGYMAQKHSVPIGDVAKDGPGLIFIIYPEAIATLPLSSAWAVVFFIMLLTLGI
 DSAMGMESVITGLIDEFQLLHRHRELFITLIVLATFLLSLFCVTNGGIYVFTLLDHFAAGTSILFGVLI
 EATIGVAWFYGVGQFSDDIQQMTGQRPSLYWRLCWKLVSPCFLLFVVVSVIVTFRPPHYGAYIFPDWANAL
 GWVIATSSMAMVPIYAAYKFCSLPGSFREKLAYAIAPKDRDELVDRGEVRQFTLRHWLKV

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001044

ORF Size: 1860 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.

RefSeq: [NM_001044.5](#)

RefSeq Size: 3945 bp

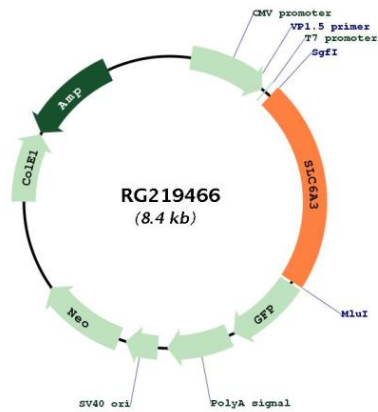
RefSeq ORF: 1863 bp

Locus ID: 6531

UniProt ID: [Q01959](#)

Cytogenetics:	5p15.33
Domains:	SNF
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Parkinson's disease
Gene Summary:	This gene encodes a dopamine transporter which is a member of the sodium- and chloride-dependent neurotransmitter transporter family. The 3' UTR of this gene contains a 40 bp tandem repeat, referred to as a variable number tandem repeat or VNTR, which can be present in 3 to 11 copies. Variation in the number of repeats is associated with idiopathic epilepsy, attention-deficit hyperactivity disorder, dependence on alcohol and cocaine, susceptibility to Parkinson disease and protection against nicotine dependence.[provided by RefSeq, Nov 2009]

Product images:



Circular map for RG219466