

## Product datasheet for **RG206822**

### OGT (NM\_181672) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OGT (NM_181672) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	OGT
Synonyms:	HINCUT-1; HRNT1; MRX106; O-GLCNAC; OGT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG206822 representing NM_181672 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGTCTTCCGTGGCAACGTGGCCGACAGCACAGAACCAACGAAACGTATGCTTTCCTTCCAAGGGT  
TAGCTGAGTTGGCACATCGAGAATATCAGGCAGGAGATTTGAGGCAGCTGAGAGACTGCATGCAGCT  
CTGGAGACAAGAGCCAGACAATACTGGTGTCTTTTACTTTCATCTATACACTTCCAGTGTGCAAGG  
CTGGACAGATCTGCTCACTTTAGCACTCTGGCAATTAACAGAACCCCTTCTGGCAGAAGCTTATTCGA  
ATTTGGGGAATGTGTACAAGGAAAGAGGGCAGTTGCAGGAGGCAATTGAGCATTATCGACATGCATTGCG  
TCTCAAACCTGATTTTCATCGATGGTTATTAACCTGGCAGCCGCTTGGTAGCAGCGGGTACATGGAA  
GGGCGAGTACAAGCTTACGTCTCTGCTCTTCAGTACAATCCTGATTTGTACTGTGTTGCGAGTGACCTGG  
GAACTGCTCAAAGCCCTGGTTCGCTTGAAGAAGCCAAGGCATGTTATTTGAAAGCAATTGAGACGCA  
ACCGAAGCTTTCAGTAGCTTGGAGTAATCTTGGCTGTGTTTTCAATGCACAAGGGGAAATTTGGCTTGA  
ATTCATCACTTTGAAAAGGCTGTCACCCTTGACCCAACTTTCTGGATGCTTATATCAATTTAGGAAATG  
TCTTGAAGAGGCACGCATTTTACAGAGCTGTGGCAGCTTATCTTCGTGCCCTAAGTTGAGTCCAAA  
TCACGCAGTGGTGCACGGCAACCTGGCTTGTGTATACTATGAGCAAGGCCTGATAGATCTGGCAATAGAC  
ACCTACAGCGGGCTATCGAACTACAACCACATTTCCCTGATGCTTACTGCAACCTAGCCAAATGCTCTCA  
AAGAGAAGGGCAGTGTGCTGAAGCAGAAGATTGTTATAATACAGCTCTCCGTCTGTGCCACCCATGC  
AGACTCTCTGAATAACCTAGCCAATATCAAACGAGAACAGGGAACATTGAAGAGGCAGTTCGCTTGTAT  
CGTAAAGCATTAGAAGTCTTCCAGAGTTTGTGCTGCCATTCAAATTTAGCAAGTGTACTGCAGCAGC  
AGGGAAAAGCTGCAGGAAGCTCTGATGCATTATAAGGAGGCTATTCGAATCAGTCTACCTTTGCTGATGC  
CTACTCTAATATGGAAACACTCTAAAGGAGATGCAGGATGTTCCAGGAGCCTTGCAGTGTATACGCGT  
GCCATCCAAATTAATCCTGCATTTGCAGATGCACATAGCAATCTGGCTTCCATTCAAGGATTCAGGGA  
ATATTCCAGAAGCCATAGCTTCTTACCGCAGGCTCTGAACTTAAGCCTGATTTTCTGATGCTTATTG  
TAACCTGGCTCATTGCCGTCAGATTGTCTGTGATTGGACAGACTATGATGAGCGAATGAAGAAGTTGGCT



[View online »](#)

AGTATTGTGGCTGACCAGTTAGAGAAGAATAGGTTGCCTTCTGTGCATCCTCATCATAGTATGCTATATC  
 CTCTTTCTCATGGCTTCAGGAAGGCTATTGCTGAGAGGCACGGCAACCTGTGCTTAGATAAGATTAATGT  
 TCTTCATAAACCACCATATGAACATCCAAAAGACTTGAAGCTCAGTATGGTCCGGCTGCGTGTAGGATAT  
 GTGAGTCCGACTTTGGGAATCATCCTACTTCTCACCTTATGCAGTCTATCCAGGCATGCCAATCCTG  
 AATAATTTGAGGTGTTCTGTTATGCCCTGAGCCAGACGATGGCACAACCTCCGAGTGAAGGTGATGGC  
 AGAAGCCAATCATTTTCATTGATCTTTCTCAGATCCATGCAATGGAAAAGCAGCTGATCGCATCCATCAG  
 GATGGAATTCATATCCTTGTAATATGAATGGCTATACTAAGGGCGCTCGAAATGAGCTTTTTCCTCA  
 GGCCAGCTCCTATTCAGGCAATGTGGCTGGGATACCCTGGGACGAGTGGTGCCTTTTCATGGATTATAT  
 TATCACTGATCAGGAACTTCGCCAGCTGAAGTTGCTGAGCAGTATTCCGAGAAATTGGCTTATATGCC  
 CACACTTTTTTTTATTGGTGATCATGCTAATATGTTCCCTCACCTGAAGAAAAAGCAGTCATCGATTTTA  
 AGTCCAATGGGCACATTTATGACAATCGGATAGTTCTGAATGGCATCGACCTCAAAGCATTTCTTGATAG  
 TCTACCAGATGTGAAAATGTCAAGATGAAGTGTCTGATGGAGGAGACAATGCAGATAGCAGTAACACA  
 GCTCTTAATATGCCTGTTATTCCATGAATACTATTGCAGAAGCAGTTATTGAAATGATTAACCGAGGAC  
 AGATTCAAATAACAATTAATGGATTCAGTATTAGCAATGGACTGGCAACTACTCAGATCAACAATAAGGC  
 TGCAACTGGAGAGGAGGTTCCCGTACCATTATTGTAACCACCCGTTCTCAGTACGGGTTACCAGAAGAT  
 GCCATCGTATACTGTAACTTAATCAGTTGTATAAAAATTGACCCTTCTACTTTGCAGATGTGGGCAACA  
 TTCTGAAGCGTGTCCCAATAGTGTACTCTGGCTGTTGCGTTTTCCAGCAGTAGGAGAACCTAATATTCA  
 ACAGTATGCACAAAACATGGGCCTGCCCGAACCCTATCATTTTTTTACCTGTTGCTCCTAAAGAGGAA  
 CACGTCAGGAGAGGCCAGCTGGCTGATGTCTGCTGGACTCCACTCTGTAATGGGCACACCACAGGGA  
 TGGATGTCTCTGGGCAGGGACCCCATGGTACTATGCCAGGAGAGACTCTTGCTTCTCGAGTTGCAGC  
 ATCCCAGCTCACTTGCTTAGGTTGTCTTGAGCTTATTGCTAAAAACAGACAAGAATATGAAGACATAGCT  
 GTGAAGCTGGAACTGATCTAGAATACCTGAAGAAAGTTCGTGGCAAAGTCTGGAAGCAAGAATATCTA  
 GCCCTCTGTTCAACACCAACAATACACAATGGAAGTACTAGAGCGGCTCTATCTACAGATGTGGGAGCATT  
 TGCAGCTGGCAACAACCTGACCACATGATTAAGCCTGTTGAAGTCACTGAGTCAGCA

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

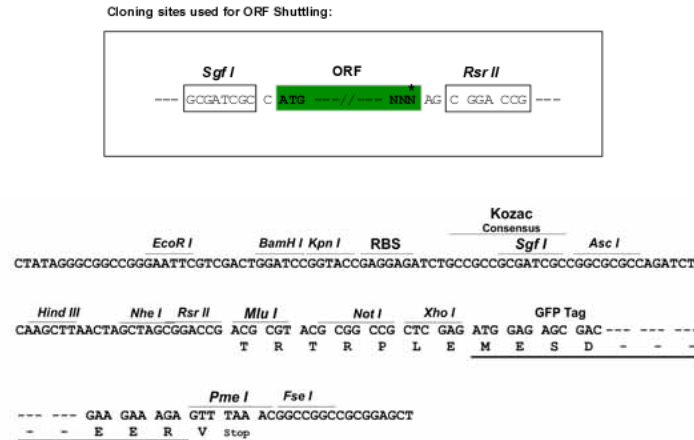
>RG206822 representing NM\_181672  
 Red=Cloning site Green=Tags(s)

MASSVGNVADSTEPTKRMLSFQGLAELAHREYQAGDFEAAERHMCMLWRQEPDNTGVLLLLSSIHQFCRR  
 LDRSAHFSTLAIKQNPLLAEAYSNLGNVYKERGQLQEAI EHYRHRLRKPDI DGYNLAAALVAAGDME  
 GAVQAYVSALQYNPDLYCVRSDLGNLLKALGRLEEAKACYLKA IETQPNFAVAWSNLGCVFNAQGEIWL  
 IHHFEKAVTLDPNFLDAYINLGNVLKEARIFDRAVAAYLRALSLSPNHAVVHGNLACVYYEQGLIDLAID  
 TYRRAIELQPHFPDAYCNLANALKEKGSVAEAEDCYNTALRLCPTHADSLNLANIKREQNIEEAVRLY  
 RKALEVFPEFAAHSNLASVLQQQGLQEALMHYKEAIRISPTFADAYSNMGNLTKEMQDVQALQCYTR  
 AIQINPAFADAHSNLASIHKDSGNIPEAIASYRTALKLKPDPDAYCNLAHCLQIVCDWTDYDERMKKL  
 SIVADQLEKNRPLPSVHPHSMYLPLSHGFRKAI AERHGNLCLDKINVLHKPPYEHKDLKLSDGRLRVGY  
 VSSDFGNHPTSHLMQSIIPGMHNPDKFEVFCYALSPDDGTNFRVKVMAEANHFI DLSQLPCNGKAADRIHQ  
 DGIHILVNMNGYTKGARNELFALRPAPIQAMWLGYPGTSALFMDYIITDQETSPA EVAEQYSEKLA YMP  
 HTFFIGDHANMFPHLKKKAVIDFKSNGHIYDNRIVLNGIDLKAFDLSLPDVKIVKMKCPDGGDNADSSNT  
 ALNMPVIPMNTIAEAVIEMINRQIQITINGFISINGLATTQINNKAATGEEVPRTIIVTTRSQYGLPED  
 AIVYCNFNQLYKIDPSTLQMWANILKRPNSVLWLLRFPVAVGEPNIQYQAQNMGLPQNRIIFSPVAPKEE  
 HVRRGQLADVCLDTPLCNGHTTGMDVLWAGTPMVTMPGETLASRVAASQLTCLGCELEIAKNRQEYEDIA  
 VKLGTDLLEYLKKVRGKVVQRIS SPLFNTKQYTMELERLYLQWEHYAAGNKPDMHIKPEVETESA

SGPTRRRLE - GFP Tag - V

**Restriction Sites:**

Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** NM\_181672

**ORF Size:** 3138 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.

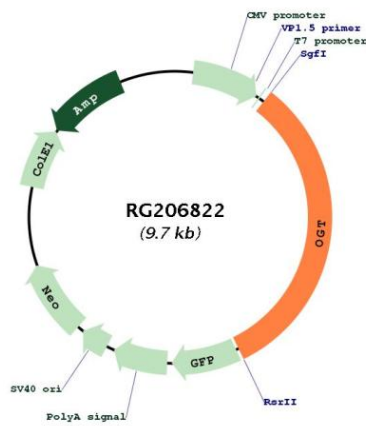
**RefSeq:** [NM\\_181672.3](#)

**RefSeq Size:** 5475 bp

**RefSeq ORF:** 3141 bp

**Locus ID:** 8473  
**UniProt ID:** [O15294](#)  
**Cytogenetics:** Xq13.1  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Metabolic pathways, O-Glycan biosynthesis  
**Gene Summary:** This gene encodes a glycosyltransferase that catalyzes the addition of a single N-acetylglucosamine in O-glycosidic linkage to serine or threonine residues. Since both phosphorylation and glycosylation compete for similar serine or threonine residues, the two processes may compete for sites, or they may alter the substrate specificity of nearby sites by steric or electrostatic effects. The protein contains multiple tetratricopeptide repeats that are required for optimal recognition of substrates. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Oct 2009]

### Product images:



Circular map for RG206822