

Product datasheet for SC109934

OGT (NM_181673) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OGT (NM_181673) Human Untagged Clone
Tag:	Tag Free
Symbol:	OGT
Synonyms:	HINCUT-1; HRNT1; MRX106; O-GLCNAC; OGT1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109934 sequence for NM_181673 edited (data generated by NextGen Sequencing)

```

ATGGCGTCTTCCGTGGGCAACGTGGCCGACAGCACAGGGTTAGCTGAGTTGGCACATCGA
GAATATCAGGCAGGAGATTTTGAGGCAGCTGAGAGACACTGCATGCAGCTCTGGAGACAA
GAGCCAGACAATACTGGTGTGCTTTTATTACTTTTCATCTATACACTTCCAGTGTGGAAGG
CTGGACAGATCTGCTCACTTTAGCACTCTGGCAATTAACAGAACCCCTTCTGGCAGAA
GCTTATTCGAATTTGGGGAATGTGTACAAGGAAAGAGGGCAGTTGCAGGAGGCAATTGAG
CATTATCGACATGCATTGCGTCTCAAACCTGATTTTCATCGATGGTTATATTAACCTGGCA
GCCGCTTGGTAGCAGCGGGTGACATGGAAGGGGCAGTACAAGCTTACGTCTCTGCTCTT
CAGTACAATCCTGATTTGTACTGTGTTTCGACAGTACCTGGGGAACCTGCTCAAAGCCCTG
GGTCGCTTGAAGAAGCCAAGGCATGTTATTTGAAAGCAATTGAGACGCAACCGAACTTT
GCAGTAGCTTGGAGTAATCTTGGCTGTGTTTTCAATGCACAAGGGGAAATTTGGCTTGCA
ATTCATCACTTTGAAAAGGCTGTCAACCCTTGACCCAACTTTCTGGATGCTTATATCAAT
TTAGGAAATGTCTTGAAGAGGCACGCATTTTTGACAGAGCTGTGGCAGCTTATCTTCGT
GCCCTAAGTTTGGTCCAAATCACGCAGTGGTGCACGGCAACCTGGCTTGTGTAATACTAT
GAGCAAGGCCTGATAGATCTGGCAATAGACACCTACAGGGCGGCTATCGAACTACAACCA
CATTTCCCTGATGCTTACTGCAACCTAGCCAATGCTCTCAAAGAGAAGGGCAGTGTGCTG
GAAGCAGAAGATTGTTATAATACAGCTCTCCGTCTGTGTCACCCATGCAGACTCTCTG
AATAACCTAGCCAATATCAAACGAGAACAGGGAACATTGAAGAGGCAGTTCGCTTGTAT
CGTAAAGCATTAGAAGTCTTCCAGAGTTTGTGCTGCTGCCATTCAAATTTAGCAAGTGTA
CTGCAGCAGCAGGAAAACCTGCAGGAAGCTCTGATGCATTATAAGGAGGCTATTGCAATC
AGTCTACCTTTGCTGATGCCTACTCTAATATGGGAAACACTCTAAAGGAGATGCAGGAT
GTTCAGGGAGCCTTGCAGTGTATACGCGTGCCATCCAAATTAATCCTGCATTTGCAGAT
GCACATAGCAATCTGGCTTCCATTATAAGGATTCAGGGAATATTCCAGAAGCCATAGCT
TCTTACCGCACGGCTCTGAAACTTAAGCCTGATTTTCTGATGCTTATTGTAACCTGGCT
CATTGCCTGCAGATTGTCTGTGATTGGACAGACTATGATGAGCGAATGAAGAAGTTGGTC
AGTATTGTGGCTGACCAGTTAGAGAAGAATAGGTTGCCTTCTGTGCATCCTCATCATAGT

```



[View online »](#)

ATGCTATATCCTCTTTCTCATGGCTTCAGGAAGGCTATTGCTGAGAGGCACGGCAACCTG
 TGCTTAGATAAGATTAATGTTCTTCATAAACCCACCATATGAACATCCAAAAGACTTGAAG
 CTCAGTGATGGTCGGCTGCGTGTAGGATATGTGAGTTCGGACTTTGGGAATCATCCTACT
 TCTCACCTTATGCAGTCTATTCCAGGCATGCACAATCCTGATAAAATTTGAGGTGTTCTGT
 TATGCCCTGAGCCAGACGATGGCACAACCTCCGAGTGAAGGTGATGGCAGAAGCCAAT
 CATTTCATTGATCTTTCTCAGATTCCATGCAATGAAAAAGCAGCTGATCGCATCCATCAG
 GATGGAATTCATATCCTTGAAATATGAATGGCTATACTAAGGGCGCTCGAAATGAGCTT
 TTTGCTCTCAGGCCAGCTCCTATTCAAGCAATGTGGCTGGGATACCCTGGGACGAGTGGT
 GCGCTTTTTCATGGATTATATTACTGATCAGGAACTTCGCCAGCTGAAGTTGCTGAG
 CAGTATCCGAGAAATTGGCTTATATGCCCCACTTTTTTTTATTGGTGATCATGCTAAT
 ATGTTCCCTCACCTGAAGAAAAAGCAGTCATCGATTTTAAAGTCCAATGGGCACATTTAT
 GACAATCGGATAGTTCTGAATGGCATCGACCTCAAAGCATTCTTGATAGTCTACCAGAT
 GTGAAAATTGTCAAGATGAAGTGCCTGATGGAGGAGACAATGCAGATAGCAGTAACACA
 GCTCTTAATATGCCTGTTATTCCTATGAATACTATTGCAGAAGCAGTTATTGAAATGATT
 AACCGAGGACAGATTCAAATAACAATTAATGGATTCAGTATTAGCAATGGACTGGCAACT
 ACTCAGATCAACAATAAGGCTGCAACTGGAGAGGAGGTTCCCCGTACCATTATTGTAACC
 ACCCGTTCTCAGTACGGTTACCAGAAGATGCCATCGTATACTGTAACTTAATCAGTTG
 TATAAAATTGACCCTTCTACTTTGCAGATGTGGGCAAACATTCTGAAGCGTGTCCCAAT
 AGTGTACTCTGGCTGTTGCGTTTTCCAGCAGTAGGAGAACCTAATATTCAACAGTATGCA
 CAAAACATGGGCCTGCCCCAGAACCCTATCATTTTTTTACCTGTTGCTCCTAAAGAGGAA
 CACGTACAGGAGAGGCCAGCTGGCTGATGCTGCTTGGACACTCCACTCTGTAATGGGCAC
 ACCACAGGGATGGATGTCCTCTGGGCAGGACCCCATGGTACTATGCCAGGAGAGACT
 CTTGCTTCTCGAGTTGCAGCATCCAGCTCACTTGCTTAGGTTGTCTTGAGCTTATTGCT
 AAAAACAGACAAGAATATGAAGACATAGCTGTGAAGCTGGGAAGTCTAGAATACCTG
 AAGAAAGTTCGTGGCAAAGTCTGGAAGCAAAGAATATCTAGCCCTCTGTTCAACACCAAA
 CAATACACAATGGAAGTAGAGCGGCTCTATCTACAGATGTGGGAGCATTATGCAGCTGGC
 AACAAACCTGACCACATGATTAAGCCTGTTGAAGTCACTGAGTCAGCATAA

Clone variation with respect to NM_181673.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_181673 unedited
 CCGCGNCCC GGNNCNCNCCCCNCCTTTTNNNNNNCNCCTTTCAGAAATTGTNATAC
 CACTACTNATAGGCGCGCGNAATTCGCACGAGNAGAGGTCAATTAGAGTTCCAGGG
 TTTGAAGCCTGTAAGTGTGCCGCGCTCAAGCCCTCCAGAGCATTGCTACGGCTGCTGC
 CCTTGTACTACTACCTCAAATACGTTCTTGTGGTAGTGGCGGCAGCAGGACCAATTAC
 CTCTTTTTGCTCTCCCTCGAGAAGCTCCAGATGGCGTCTCCGTGGGCAACGTGGCCGAC
 AGCACAGGGTTAGCTGAGTTGGCACATCGAGAATATCAGGCAGGAGATTTTGAGGCAGCT
 GAGAGACTGTCATGCAGCTCTGGAGACAAGAGCCAGACAATACTGGTGTCTTTTATTA
 CTTTCATCTATACACTTCCAGTGTGCAAGGCTGGACAGATCTGCTCACTTTAGCACTCTG
 GCAATTAACAGAACCCCTTCTGGCAGAAGCTTATTGCAATTTGGGGAATGTGTACAAG
 GAAAGAGGGCAGTTGCAGGAGGCAATTGAGCATTATCGACATGCATTGCGTCTCAAACCT
 GATTTTCATCGATGGTTATATTAACCTGGCAGCCGCTTGGTAGCAGCGGGTGACATGGAA
 GGGGCAGTACAAGCTTACGTCTCTGCTCTTCACTACAATCCTGATTTGACTGTGTTTCGC
 AGTGACCTGNNGAACCTGCTCAAAGCCCTGNGTCGCTTGAAGAGCCCAAGCATGTTATT
 TGAAGCAATTGAGACGCACCCGAACCTTGCAGTAGCCTTGGAGTATCTGGGCTGTGTTN
 TTAATGCACAAGGGGAAATTTGCCTTGAATTCATCACTTTGNAAGGCCTGTCAACCTT
 GACCCAAACTTTTCTGGAGCTTATATCAATTTAGAAAAGTCTTGAAGAGCAGCATT
 TGACAGAN

Restriction Sites: NotI-NotI
ACCN: NM_181673
Insert Size: 4000 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_181673.1</u> , <u>NP_858059.1</u>
RefSeq Size:	5445 bp
RefSeq ORF:	3111 bp
Locus ID:	8473
UniProt ID:	<u>O15294</u>
Cytogenetics:	Xq13.1
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, O-Glycan biosynthesis
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 5' coding region compared to variant 1. This results in a shorter protein (isoform 2) compared to isoform 1.</p>