

UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit Recombinant Protein | OGT recombinant protein

Recombinant Human UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit

CATALOG # AAA115161	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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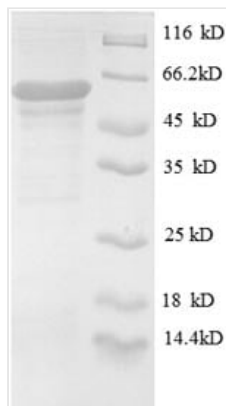
PRODUCT SYNONYMS

UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit; Recombinant Human UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit; O-GlcNAc transferase subunit p110; O-linked N-acetylglucosamine transferase 110 kDa subunit; OGT; OGT recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	606-1022aa; partial
Sequence	MAEANHFDL SQIPCNKAA DRIHQDGIH LVNMNGYTKG ARNELFALRP APIQAMWLG Y PGTSGALFMD YIITDQETSP AEVAEQYSEK LAYMPHTFFI GDHANMFPHL KKKAVIDFKS NGHIYDNRIV LNGIDLKAF L DSLDPVKIVK MKCPDGGDNA DSSNTALNMP VIPMNTIAEA VIEMINRGQI QITINGFSIS NGLATTQINN KAATGEEVPR TIIVTTRSQY GLPEDAIVYC NFNQLYKIDP STLQMWANIL KRVPSVWLW L RFPVAVGEPN IQQYAQNMGL PQNRIIFSPV APKEEHVRRG QLADVCLDTP LCNGHTTGMD VLWAGTPMVT MPGETLASRV AASQLTCLGC LELIAKNRQE YEDIAVKLGT DLEYLKKVRG KVKQRISSP LFNTKQYTME LERLYLQ
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for OGT recombinant protein	Catalyzes the transfer of a single N-acetylglucosamine from UDP-GlcNAc to a serine or threonine residue in cytoplasmic and nuclear proteins resulting in their modification with a beta-linked N-acetylglucosamine (O-GlcNAc). Glycosylates a large and diverse number of proteins including histone H2B, AKT1, EZH2, PFKL, KMT2E/MLL5, MAPT/TAU and HCFC1. Can regulate their cellular processes via cross-talk between glycosylation and phosphorylation or by affecting proteolytic processing. Involved in insulin resistance in muscle and adipocyte cells via glycosylating insulin signaling components and inhibiting the 'Thr-308' phosphorylation of AKT1, enhancing IRS1 phosphorylation and attenuating insulin signaling. Involved in glycolysis regulation by mediating glycosylation of 6-phosphofructokinase PFKL, inhibiting its activity. Component of a THAP1/THAP3-HCFC1-OGT complex that is required for the regulation of the transcriptional activity of RRM1. Plays a key role in chromatin structure by mediating O-GlcNAcylation of 'Ser-112' of histone H2B: recruited to CpG-rich transcription start sites of active genes via its interaction with TET proteins (TET1, TET2 or TET3). As part of the NSL complex indirectly involved in acetylation of nucleosomal histone H4 on several lysine residues. O-GlcNAcylation of 'Ser-75' of EZH2 increases its stability, and facilitating the formation of H3K27me3 by the PRC2/EED-EZH2 complex. Regulates circadian oscillation of the clock genes and glucose homeostasis in the liver. Stabilizes clock proteins ARNTL/BMAL1 and CLOCK through O-glycosylation, which prevents their ubiquitination and subsequent degradation. Promotes the CLOCK-ARNTL/BMAL1-mediated transcription of genes in the negative loop of the circadian clock such as PER1/2 and CRY1/2
Product Categories/Family for OGT recombinant protein	Neuroscience

References

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NCBI AND UNIPROT INFORMATION

NCBI GI #	32307148
NCBI GeneID	8473
NCBI Accession #	NP_858058.1
NCBI GenBank Nucleotide #	NM_181672.2

UniProt Accession #	O15294; Q7Z3K0; Q8WWW8; Q96CC1; Q9UG57
Molecular Weight	62.5 kDa
NCBI Official Full Name	UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit isoform 1
NCBI Official Synonym Full Names	O-linked N-acetylglucosamine (GlcNAc) transferase
NCBI Official Symbol	OGT
NCBI Official Synonym Symbols	HRNT1; HINCUT-1; O-GLCNAC
NCBI Protein Information	UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit
UniProt Protein Name	UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit
UniProt Gene Name	OGT
UniProt Synonym Gene Names	OGT
UniProt Entry Name	OGT1_HUMAN

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