Datasheet for ABIN7174657

anti-OGT antibody (AA 606-1022) (HRP)

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Overview

Quantity:	100 µg
Target:	OGT
Binding Specificity:	AA 606-1022
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This OGT antibody is conjugated to HRP
Application:	ELISA

Product Details

Immunogen:	Recombinant Human UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit protein (606-1022AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	OGT
Alternative Name:	OGT (OGT Products)
Background:	Background: 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. Aliases: FLJ23071 antibody, GlcNAc transferase antibody, HRNT1 antibody, MGC22921 antibody, O GlcNAc antibody, O GlcNAc transferase p110 subunit antibody, O GlcNAc transferase subunit p110 antibody, O linked N acetylglucosamine (GlcNAc) transferase (UDP N acetylglucosamine:polypeptide N acetylglucosaminyl transferase) antibody, O linked N acetylglucosamine (GlcNAc) transferase antibody, O linked N acetylglucosamine transferase 110 kDa subunit antibody, O-GlcNAc transferase subunit p110 antibody, O-linked N-acetylglucosamine transferase 110 kDa subunit antibody, ogt antibody, OGT1_HUMAN antibody, UDP N acetylglucosamine peptide N acetylglucosaminyltransferase 110 kDa subunit antibody, UDP N acetylglucosamine peptide N acetylglucosaminyltransferase GlcNAc transferase antibody, UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa subunit antibody, UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase antibody, Uridinediphospho N acetylglucosamine:polypeptide beta N acetylglucosaminyl transferase antibody
UniProt:	O15294
Pathways:	Regulation of Carbohydrate Metabolic Process

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.