

OGT Polyclonal Antibody

Catalog No: YT6165

Reactivity: Human; Mouse; Rat

Applications: WB;ELISA

Target: OGT

Fields: >>Other types of O-glycan biosynthesis;>>Insulin resistance

Gene Name: OGT

Protein Name: UDP-N-acetylglucosamine--peptide N-acetylglucosaminyltransferase 110 kDa

subunit (EC 2.4.1.255) (O-GlcNAc transferase subunit p110) (O-linked N-

acetylglucosamine transferase 110 kDa subunit) (OGT)

Human Gene Id: 8473

Human Swiss Prot

No:

Mouse Gene Id: 108155

O15294

Q8CGY8

Mouse Swiss Prot

No:

Rat Gene ld: 26295

Rat Swiss Prot No: P56558

Immunogen: Synthesized peptide derived from human OGT Polyclonal AA range: 435-475

Specificity: This antibody detects endogenous levels of OGT.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500-2000, ELISA 1:10000-20000

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Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 115kD

Cell Pathway: O-Glycan biosynthesis;

Background: 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],

Function : catalytic activity:UDP-N-acetyl-D-glucosamine + peptide = UDP + N-acetyl-beta-

D-glucosaminyl-peptide.,function:Addition of nucleotide-activated sugars directly onto the polypeptide through O-glycosidic linkage with the hydroxyl of serine or

threonine.,online information:UDP-N-acetylglucosamine--peptide N-

acetylglucosaminyltransferase 110kDa subunit,pathway:Protein modification;

protein glycosylation., similarity: Belongs to the O-GlcNAc transferase

family.,similarity:Contains 13 TPR repeats.,subunit:Heterotrimer of two 110 kDa and one 70 kDa subunits. It is not known if the 70 kDa subunit is encoded by a separate gene or is the product of either of a proteolytic degradation or an alternative initiation of the 110 kDa subunit (By similarity). Interacts with

 $\label{prop:hcfc1} \mbox{HCFC1.,} tissue specificity: \mbox{Highly expressed in pancreas and to a lesser extent in}$

skeletal muscle, heart, brain and placenta. Present in

Subcellular Location:

Nucleus . Cytoplasm . Predominantly localizes to the nucleus. .; [Isoform 2]: Mitochondrion . Membrane . Associates with the mitochondrial inner membrane . .;

[Isoform 3]: Cytoplasm . Nucleus . Cell membrane . Mitochondrion membrane . Cell projection . Mostly in the nucleus. Retained in the nucleus via interaction with HCFC1 (PubMed:21285374). After insulin induction, translocated from the nucleus to the cell membrane via phosphatidylinositide binding. Colocalizes with AKT1 at the plasma membrane. TRAK1 recruits this protein to mitochondria. In

the absence of TRAK1, localizes in cytosol and nucleus (By similarity). .; [Isoform

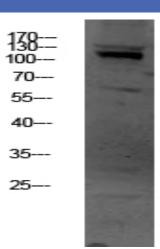
4]: Cytoplasm. Nucleus.

Expression: Highly expressed in pancreas and to a lesser extent in skeletal muscle, heart,

brain and placenta. Present in trace amounts in lung and liver.



Products Images



Western blot analysis of HEPG2 lysate, antibody was diluted at 1000. Secondary antibody(catalog#:RS0002) was diluted at 1:20000