

HUGT2 (N-16): sc-84312

BACKGROUND

HUGT2 is also known as UGCGL2 (UDP-glucose ceramide glucosyltransferase-like 2) or UGT2 (UDP-glucose: glycoprotein glucosyltransferase 2) and is a 1,516 amino acid protein that is expressed abundantly in kidney, pancreas, heart and skeletal muscle. HUGT2 is localized to the lumen of the ER (endoplasmic reticulum) and to the ER-Golgi intermediate compartment which regulates transportation between the ER and the Golgi. HUGT2 is a quality control protein that targets unfolded glycoproteins for glucosylation in a calcium-dependent manner, but may use manganese in the absence of calcium. HUGT2 targets glycans by attaching single glucose residues to glycans with amino acid sequences which are not correctly folded, an enzymatic process that is exhibited during carbohydrate processing. Patients with type 2 diabetes express altered HUGT2 proteins in their β cells, suggesting that these patients may also have defects in their ER glycoprotein quality control abilities.

CHROMOSOMAL LOCATION

Genetic locus: UGCGL2 (human) mapping to 13q32.1; Ugcgl2 (mouse) mapping to 14 E4.

SOURCE

HUGT2 (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of HUGT2 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84312 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

HUGT2 (N-16) is recommended for detection of HUGT2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HUGT2 (N-16) is also recommended for detection of HUGT2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HUGT2 siRNA (h): sc-75315, HUGT2 siRNA (m): sc-146114, HUGT2 shRNA Plasmid (h): sc-75315-SH, HUGT2 shRNA Plasmid (m): sc-146114-SH, HUGT2 shRNA (h) Lentiviral Particles: sc-75315-V and HUGT2 shRNA (m) Lentiviral Particles: sc-146114-V.

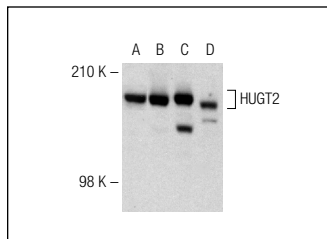
Molecular Weight of HUGT2: 175 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MIA PaCa-2 cell lysate: sc-2285 or A-10 cell lysate: sc-3806.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HUGT2 (N-16): sc-84312. Western blot analysis of HUGT2 expression in MIA PaCa-2 (A), C2C12 (B), A-10 (C) and HeLa (D) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


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Try **HUGT2 (G-7): sc-515421**, our highly recommended monoclonal alternative to HUGT2 (N-16).