Anti-UGGT1 Antibody

HA500025

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	177 kDa

Description: UGGT is part of the ER quality control system of glycoprotein folding and its activity increases the potential for correctly folded glycoproteins.The main proteins involved in the ER quality control system are UGGT, the ER lectin chaperones (calnexin and calreticulin), and glucosidase II. UGGT first recognizes the incompletely folded glycoprotein and monoglucosylates it. The lectins, calnexin and calreticulin, have high affinities for monoglucosylated proteins and the ER chaperones that associate with these lectins assist the folding of the misfolded glycoprotein. Subsequently, glucosidase II will deglucosylate the glycoprotein. If the glycoprotein is still misfolded, UGGT will re-glucosylate it and allow it to go through the cycle again.

Immunogen: Recombinant protein within human UGGT1 aa 1350-1555.

Positive control: Rat liver tissue lysate, HL-60 cell lysate, mouse liver tissue lysate, mouse brain tissue.

Subcellular location: Endoplasmic reticulum.

Database links: SwissProt: Q9NYU2 Human | Q6P5E4 Mouse | Q9JLA3 Rat

Recommended Dilutions:

WB	1:500-1:1,000
IHC-P	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Images

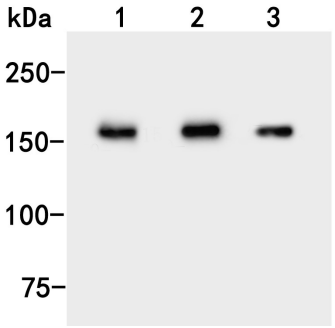

Fig1: Western blot analysis of UGGT1 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (HA500025, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: Rat liver tissue lysate
Lane 2: HL-60 cell lysate
Lane 3: Mouse liver tissue lysate

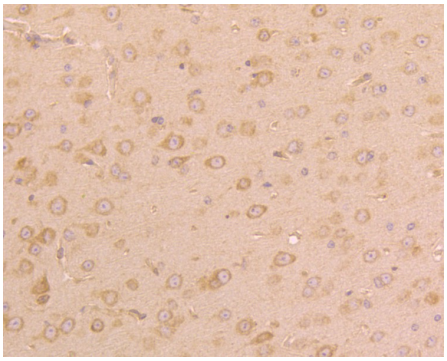

Fig2: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-UGGT1 antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA500025, 1/200) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Arnold S.M. et. al. Two homologues encoding human UDP-glucose:glycoprotein glucosyltransferase differ in mRNA expression and enzymatic activity. Biochemistry 39:2149-2163(2000).