

Mouse Anti-UGP2 Monoclonal Antibody

Mouse, Monoclonal (Anti UGP2)

Cat. No. CAB031

Lot. No. (See product label)

PRODUCT INFORMATION

Antigen information: The enzyme encoded by UGP2 gene is an important intermediary in mammalian carbohydrate interconversions. It transfers a glucose moiety from glucose-1-phosphate to MgUTP and forms UDP-glucose and MgPPi. In liver and muscle tissue, UDP-glucose is a direct precursor of glycogen; in lactating mammary gland it is converted to UDP-galactose which is then converted to lactose. The eukaryotic enzyme has no significant sequence similarity to the prokaryotic enzyme. Two transcript variants encoding different isoforms have been found for this gene. So far two transcript variants encoding different isoforms have been found for this gene.

Immunogen: Cytosolic proteins of human adult liver tissues (fraction 1)

Specificity: Recognizes recombinant UGP2 (Homo sapiens UDP-glucose pyrophosphorylase 2) at the molecular weight of 53kD and native protein at 56kDa.

Isotope: Mouse Monoclonal IgG2b

Clone : BAD062

Species Cross-reactivity: Human. Others not determined.

Formulation: 200µg of protein G purified IgG2b() in 172µL of 70% storage buffer (0.1M Tris-HCl, pH 7.4, 0.15M NaCl, 0.04% merthiolate) and 30% glycerol.

Handling Recommendations: Aliquot into microcentrifuge tubes and store at -20°C. Avoid repeated freeze/thaw cycles, which may damage IgG and affect product performance.

Applications: This antibody is effective in ELISA, and immunoblotting for both tagged and native proteins.

Recommended Working Dilution: The optimal working dilution should be determined according to each specific assay condition.

FOR RESEARCH USE ONLY

REFERENCES

1. Strausberg RL, *et al.* Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc Natl Acad Sci U S A.* 2002 Dec 24; 99(26):16899-16903.
2. Walter L, *et al.* Identification, characterization and cytogenetic mapping of a yeast Vps54 homolog in rat and mouse. *Gene.* 2002 Feb 20; 285(1-2):213-220.

GENE INFORMATION

Gene Name: UGP2

Synonyms:UDPG; pHC379; UGP2;UDP-glucose pyrophosphorylase 2; UGPase 2; UDP-glucose diphosphorylase; UDPGP2; UTP-glucose-1-phosphate uridylyltransferase;UGPP2; UTP--glucose-1-phosphate uridylyltransferase 2; uridyl diphosphate glucose pyrophosphorylase 2

mRNA Refseq: [NM_001001521](#)

Protein Refseq: [NP_001001521](#)

MIM: [191760](#)

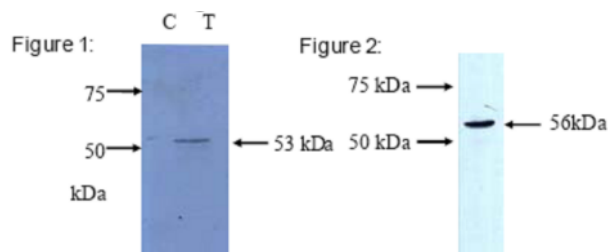
UniProt ID: [Q16851](#)

Gene ID: [7360](#)

Chromosome Location: 2p14-p13

Pathway:Galactose metabolism; Nucleotide sugars metabolism; Pentose and glucuronate interconversions; Starch and sucrose metabolism; Biological oxidations; Metabolism of carbohydrates.

Function:UTP:glucose-1-phosphate uridylyltransferase activity; nucleotidyltransferase activity; protein binding; transferase activity



Western blotting test

Figure 1: C: negative control, T: total bacterial proteins
The antibody detects a 53 kDa recombinant protein, corresponding to the molecular weight of UGP2 on SDS-PAGE .

Figure 2: the antibody detects a 56kDa protein in the lysates of human adult liver tissues, with antibody concentration of 4µg/mL.