

UGP2 (O-21): sc-134141

BACKGROUND

UGP2 (UDP-glucose pyrophosphorylase 2), also known as UDPG, UGPP2, UDPGP2 or pH379, is an evolutionarily conserved protein belonging to the UDPGP type 1 family of proteins. Localizing to the cytoplasm, UGP2 forms homo-oligomers and is believed to function as a glucosyl donor in cellular metabolic pathways. More specifically, UGP2 catalyzes the transfer of a glucose moiety from glucose-1-phosphate to UTP, producing a diphosphate and UDP-glucose. UDP-glucose is an essential precursor for the synthesis of polysaccharides; in liver and muscle, UDP-glucose is a precursor of glycogen, in liver UDP-glucose is also a precursor of UDP-glucuronate, and in lactating mammary gland UDP-glucose is converted to UDP-galactose and then to lactose.

REFERENCES

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- Duggleby, R.G., Peng, H.L. and Chang, H.Y. 1996. An improved assay for UDP-glucose pyrophosphorylase and other enzymes that have nucleotide products. *Experientia* 52: 568-572.
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CHROMOSOMAL LOCATION

Genetic locus: UGP2 (human) mapping to 2p15; Ugp2 (mouse) mapping to 11 A3.1.

SOURCE

UGP2 (O-21) is an affinity purified rabbit polyclonal antibody raised against synthetic UGP2 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

UGP2 (O-21) is recommended for detection of UGP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for UGP2 siRNA (h): sc-94682, UGP2 siRNA (m): sc-154894, UGP2 shRNA Plasmid (h): sc-94682-SH, UGP2 shRNA Plasmid (m): sc-154894-SH, UGP2 shRNA (h) Lentiviral Particles: sc-94682-V and UGP2 shRNA (m) Lentiviral Particles: sc-154894-V.

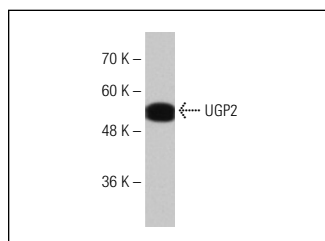
Molecular Weight of UGP2: 56 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

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).

DATA



UGP2 (O-21): sc-134141. Western blot analysis of UGP2 expression in Hep G2 whole cell lysate.

PROTOCOLS

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



Try **UGP2 (B-3): sc-377089** or **UGP2 (C-6): sc-514174**, our highly recommended monoclonal alternatives to UGP2 (O-21).