

# UGP2 (H-300): sc-292069

## BACKGROUND

UGP2 (UDP-glucose pyrophosphorylase 2), also known as UDPG, UGPP2, UDPGP2 or pHC379, is an evolutionarily conserved protein belonging to the UDPGP type 1 family of proteins. Localizing to the cytoplasm, UGP2 forms homooligomers 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

- Shows, T.B., et al. 1978. Assignment of a molecular form of UDP glucose pyrophosphorylase (UGPP2) to chromosome 2 in man. *Cytogenet. Cell Genet.* 22: 215-218.
- Peng, H.L., et al. 1993. Cloning of a human liver UDP-glucose pyrophosphorylase cDNA by complementation of the bacterial galU mutation. *FEBS Lett.* 329: 153-158.

## CHROMOSOMAL LOCATION

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

## SOURCE

UGP2 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of UGP2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

UGP2 (H-300) 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)], 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).

UGP2 (H-300) is also recommended for detection of UGP2 in additional species, including equine, bovine, porcine and avian.

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.

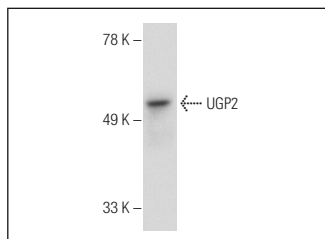
Molecular Weight of UGP2: 56 kDa.

Positive Controls: Mouse liver extract: sc-2256, 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). 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



UGP2 (H-300): sc-292069. Western blot analysis of UGP2 expression in mouse liver tissue extract.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://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 (H-300).