SANTA CRUZ BIOTECHNOLOGY, INC.

UGP2 (34-B): sc-100491

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 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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CHROMOSOMAL LOCATION

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

RESEARCH USE

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

SOURCE

UGP2 (34-B) is a mouse monoclonal antibody raised against recombinant UGP2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

UGP2 (34-B) 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.

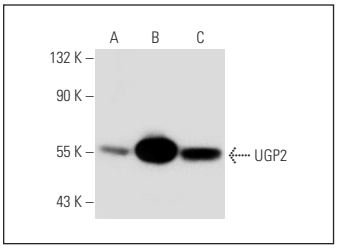
Molecular Weight of UGP2: 56 kDa.

Positive Controls: UGP2 (h2): 293T Lysate: sc-116020, HeLa whole cell lysate: sc-2200 or UGP2 (m2): 293T Lysate: sc-126190.

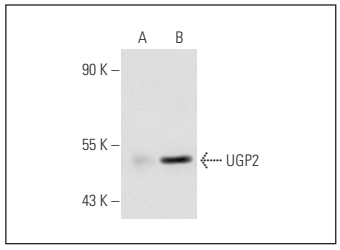
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 (34-B): sc-100491. Western blot analysis of UGP2 expression in non-transfected 293T: sc-117752 (**A**), human UGP2 transfected 293T: sc-116020 (**B**) and HeLa (**C**) whole cell lysates.



UGP2 (34-B): sc-100491. Western blot analysis of UGP2 expression in non-transfected: sc-117752 (**A**) and mouse UGP2 transfected: sc-126190 (**B**) 293T 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.