

UGP2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2760b

Product Information

Application	IHC-P, WB, E
Primary Accession	<u>Q16851</u>
Other Accession	<u>P79303, Q91ZJ5, O35156, Q07130</u>
Reactivity	Human
Predicted	Bovine, Hamster, Mouse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15109
Calculated MW	56940
Antigen Region	467-497

Additional Information

Gene ID	7360
Other Names	UTPglucose-1-phosphate uridylyltransferase, UDP-glucose pyrophosphorylase, UDPGP, UGPase, UGP2, UGP1
Target/Specificity	This UGP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 467-497 amino acids from the C-terminal region of human UGP2.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	UGP2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	UGP2 (<u>HGNC:12527</u>)
Function	UTPglucose-1-phosphate uridylyltransferase catalyzing the conversion of glucose-1-phosphate into UDP-glucose, a crucial precursor for the production

of glycogen.Cellular LocationCytoplasmTissue LocationHighly expressed in various brain regions. Expressed in amygdala, anterior
cingulate cortex, caudate, cerebellar hemisphere, cerebellum, cortex, frontal
cortex, hippocampus, hypothalamus, nucleus accumbens, putamen, spinal
cord and substantia nigra (PubMed:31820119). Also widely expressed among
other tissues, including liver, heart, placenta, lung, kidney, pancreas and
skeletal muscle (PubMed:8354390, PubMed:8631325).

Background

UGP2 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.

References

Ewing,R.M., Mol. Syst. Biol. 3, 89 (2007) Wistow,G., (er) Mol. Vis. 8, 205-220 (2002) Chang,H.Y., Eur. J. Biochem. 236 (2), 723-728 (1996)

Images



All lanes : Anti-UGP2 Antibody (C-term) at 1:2000 dilution Lane 1: A2058 whole cell lysate Lane 2: HepG2 whole cell lysate Lane 3: Human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 57 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with UGP2 antibody (C-term) (Cat.#AP2760b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Citations

• Expression of UGP2 and CFL1 expression levels in benign and malignant pancreatic lesions and their

<u>clinicopathological significance.</u>
<u>SHP2 and UGP2 are Biomarkers for Progression and Poor Prognosis of Gallbladder Cancer.</u>

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.