

For Research Use Only

GPD1 Polyclonal antibody, PBS Only

Catalog Number: 13451-1-PBS



Basic Information

Catalog Number: 13451-1-PBS	GenBank Accession Number: BC032234	Purification Method: Antigen affinity purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 2819	
Source: Rabbit	UNIPROT ID: P21695	
Isotype: IgG	Full Name: glycerol-3-phosphate dehydrogenase 1 (soluble)	
Immunogen Catalog Number: AG4278	Calculated MW: 349 aa, 38 kDa	
	Observed MW: 32-42 kDa	

Applications

Tested Applications:
WB, IF/ICC, Indirect ELISA

Species Specificity:
human, mouse, rat

Background Information

GPD1 (Glycerol-3-phosphate dehydrogenase 1) is an important enzyme belonging to the NAD-dependent glycerol-3-phosphate dehydrogenase family. Its C-terminal structural domain contains multiple helical structures for binding the substrate DHAP, and its N-terminal structural domain contains a β -folded core for binding NADH. GPD1 catalyzes the conversion of dihydroxyacetone phosphate (DHAP) and reduced nicotinamide adenine dinucleotide (NADH) to glycerol-3-phosphate (G3P) and NAD⁺, and plays a key role in carbohydrate and lipid metabolism. GPD1 also works with mitochondrial glycerol-3-phosphate dehydrogenase to form a glycerophosphate shuttle system that facilitates the transfer of reducing equivalents from the cytoplasm to the mitochondria. Abnormal activity of GPD1 has been associated with a variety of metabolic disorders, such as obesity, hypertriglyceridemia, and GPD1 has been implicated in cancer, potentially acting as a tumor suppressor.

Storage

Storage:
Store at -80°C.

Storage Buffer:
PBS Only

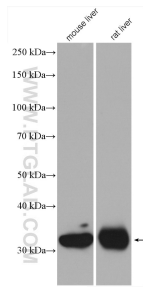
For technical support and original validation data for this product please contact:

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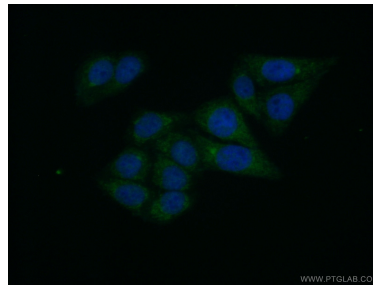
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W: ptglab.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 13451-1-AP (GPD1 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 13451-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (10% Formaldehyde) fixed HepG2 cells using 13451-1-AP (GPD1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 13451-1-PBS in a different storage buffer formulation.