For Research Use Only

GPD1 Recombinant antibody

Catalog Number:84800-4-RR

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Basic Information

Catalog Number:
84800-4-RR

Size:
100ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4278

GenBank Accession Number:
BC032234

GeneID (NCBI):
2819

UNIPROT ID:
P21695

Full Name:
glycerol-3-phosphate dehydrogenase 1 (soluble)

Calculated MW:
349 aa, 38 kDa

Observed MW:
32 kDa

Purification Method:
Protein A purfication

CloneNo.:
242359C4

Recommended Dilutions:
WB 1:1000-1:6000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
human, mouse

Positive Controls:

WB : HepG2 cells, mouse heart tissue

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 -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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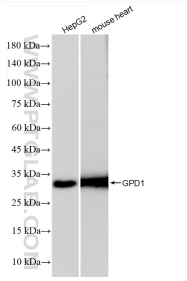
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84800-4-RR (GPD1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.