For Research Use Only

## GPD1 Recombinant antibody, PBS Only

Catalog Number:84800-4-PBS



**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** 

84800-4-PBS

GeneID (NCBI):

Protein A purfication

100ug, Concentration: 1 mg/ml by

CloneNo.:

242359C4

Nanodrop:

**UNIPROT ID:** 

BC032234

P21695 Full Name:

Rabbit

glycerol-3-phosphate dehydrogenase

Isotype: IgG

1 (soluble)

Immunogen Catalog Number: AG4278

Calculated MW: 349 aa, 38 kDa

Observed MW:

32 kDa

**Applications** 

**Tested Applications:** 

WB, Indirect ELISA

Species Specificity:

human, mouse

## **Background Information**

GPD1 (Glycerol-3-phosphate dehydrogenase 1) is an important enzyme belonging to the NAD-dependent glycerol-3phosphate 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:

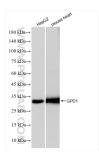
Store at -80°C.

Storage Buffer:

PBS Only

in USA), or 1(312) 455-8498 (outside USA)

## 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. This data was developed using the same antibody clone with 84800-4-PBS in a different storage buffer formulation.