For Research Use Only

GPD1 Recombinant antibody, PBS Only

Catalog Number:84800-4-PBS



Basic Information

Catalog Number: GenBank Accession Number:

Purification Method: BC032234 Protein A purfication

84800-4-PBS Concentration: 1 mg/ml

GeneID (NCBI): CloneNo.: 2819 242359C4

Source: **UNIPROT ID:** Rabbit P21695 Full Name: Isotype:

glycerol-3-phosphate dehydrogenase

Immunogen Catalog Number: AG4278 Calculated MW: 349 aa, 38 kDa

Observed MW: 32 kDa

1 (soluble)

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 $\,\beta$ -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

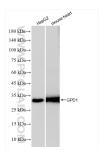
Storage:

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

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.