

Datasheet for ABIN7565885
anti-GPD1 antibody (HRP)



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Overview

Quantity:	25 µL
Target:	GPD1
Reactivity:	Rabbit
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This GPD1 antibody is conjugated to HRP
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Glycerol-3-Phosphate Dehydrogenase Antibody Peroxidase Conjugated
Immunogen:	Immunogen: Glycerol-3-Phosphate-Dehydrogenase [Rabbit Muscle] Immunogen Type: Native Protein
Cross-Reactivity (Details):	Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase, anti-Goat Serum as well as purified and partially purified Glycerol-3-Phosphate-Dehydrogenase [Rabbit Muscle].
Characteristics:	Synonyms: goat anti-Glycerol-3-Phosphate Dehydrogenase Antibody HRP Conjugation, Peroxidase Conjugated goat anti-Glycerol-3-Phosphate Dehydrogenase Antibody, FLJ26652 antibody, G3PD antibody, Gdc-1 antibody, Glycerphosphate dehydrogenase antibody, GPD-C antibody, Gpd1 protein antibody
Purification:	Glycerol-3-Phosphate Dehydrogenase is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion

Product Details

exchange chromatography followed by extensive dialysis against the buffer stated above.

Sterility: Sterile filtered

Target Details

Target: GPD1

Alternative Name: GPD1 ([GPD1 Products](#))

Background: Background: Glycerol-3-phosphate dehydrogenase serves as a major link between carbohydrate metabolism and lipid metabolism. Through the reduction of dihydroxyacetone phosphate into glycerol 3-phosphate, GPDH allows the prompt dephosphorylation of glycerol 3-phosphate into glycerol. It is also a major contributor of electrons to the electron transport chain in the mitochondria. GPDH is responsible for maintaining the redox potential across the inner mitochondrial membrane in glycolysis. Since glycerol is a main subunit in lipid metabolism, its abundance can easily lead to an increase in triglyceride accumulation at a cellular level. As a result, there is a tendency to form adipose tissue leading to an accumulation of fat that favors obesity. GPDH has also been found to play a role in Brugada syndrome. Mutations in the gene encoding GPD1 have been proven to cause defects in the electron transport chain. This conflict with NAD⁺/NADH levels in the cell is believed to contribute to defects in cardiac sodium ion channel regulation and can lead to a lethal arrhythmia during infancy.

Gene ID: 100339469, 3043365

UniProt: [P08507](#)

Application Details

Application Notes: Application Note: Anti-Glycerol-3-Phosphate Dehydrogenase has been tested by western blot and is suitable to be assayed against 1.0 µg of Glycerol-3-Phosphate-Dehydrogenase [Rabbit Muscle] in a standard capture ELISA using ABTS (2,2'-azino-bis-[3-ethylbenthiazoline-6-sulfonic acid]) code # ABTS-100 as a substrate for 30 minutes at room temperature. A working dilution of 1:500 to 1:2,500 of the reconstitution concentration is suggested for this product. Western Blot Dilution: 1:500 - 1:2,500 ELISA Dilution: 1:1,000 - 1:5,000 Other: User Optimized

Restrictions: For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free Preservative: 0.01 % (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiry Date:	12 months