



Recombinant Protein Technical Manual
Recombinant Human GPD1/GDP-C Protein (E. coli,
His Tag)
RPES3771

Product Data:

Product SKU: RPES3771

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: P21695

Protein Information:

Molecular Mass: 39.4 kDa

AP Molecular Mass: 33-37 kDa

Tag: N-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 10% glycerol, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Glycerol-3-Phosphate Dehydrogenase [NAD(+)] Cytoplasmic; GPD-C; GPDH-C; GPD1; HTGTI

Immunogen Information:

Sequence: Met 1-Met349

Background:

GPD1, also known as glycerolphosphate dehydrogenase 1, is a member of the NAD-dependent glycerol-3-phosphate dehydrogenase family. GPD1 catalyzes the reversible redox conversion of dihydroxyacetone phosphate (DHAP), thus plays a critical role in carbohydrate and lipid metabolism. It also reduces nicotinic adenine dinucleotide (NADH) to glycerol-3-phosphate (G3P) and NAD⁺. Meanwhile, GPD1 and mitochondrial glycerol-3-phosphate dehydrogenase also form a glycerol phosphate shuttle that facilitates the transfer of reducing equivalents from the cytosol to mitochondria. Mutations in GPD1 gene are a cause of transient infantile hypertriglyceridemia.