

## Product datasheet for **TA592780**

### **glucose 6 phosphatase, catalytic subunit (G6PC) Rabbit Monoclonal Antibody [Clone ID: OTIR5G10]**

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTIR5G10
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:300-1:1500
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human G6PC (NP_000142). The exact sequence is proprietary.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Shipped at -20°C or with ice packs, Upon delivery store at -20°C. Dilute in PBS(pH7.3) if necessary. Stable for 12 months from date of receipt. Avoid repeated freeze-thaws.
Predicted Protein Size:	40.5 kDa
Gene Name:	glucose-6-phosphatase catalytic subunit 1
Database Link:	<a href="#">NP_000142</a> <a href="#">Entrez Gene 2538 Human</a> <a href="#">P35575</a>



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**Background:**

Glucose-6-phosphatase (G6Pase) is a multi-subunit integral membrane protein of the endoplasmic reticulum that is composed of a catalytic subunit and transporters for G6P, inorganic phosphate, and glucose. This gene (G6PC) is one of the three glucose-6-phosphatase catalytic-subunit-encoding genes in human: G6PC, G6PC2 and G6PC3. Glucose-6-phosphatase catalyzes the hydrolysis of D-glucose 6-phosphate to D-glucose and orthophosphate and is a key enzyme in glucose homeostasis, functioning in gluconeogenesis and glycogenolysis. Mutations in this gene cause glycogen storage disease type I (GSD1). This disease, also known as von Gierke disease, is a metabolic disorder characterized by severe hypoglycemia associated with the accumulation of glycogen and fat in the liver and kidneys. [provided by RefSeq, Feb 2011]

**Synonyms:**

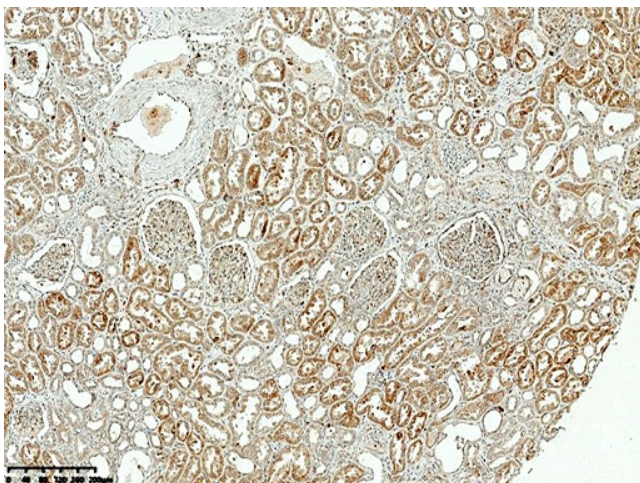
G6Pase; G6PC; G6PT; GSD1; GSD1a

**Protein Families:**

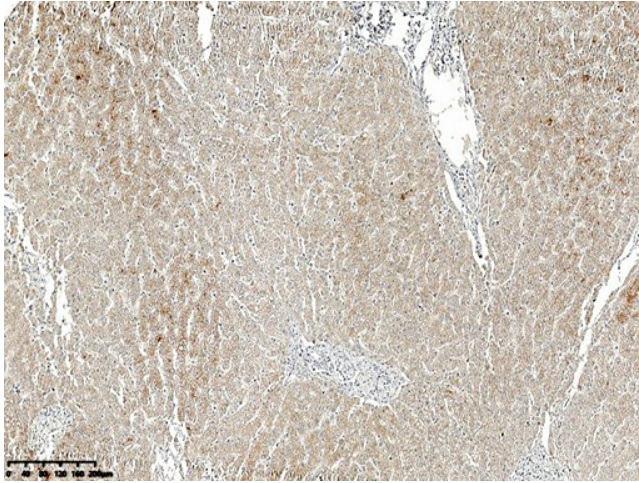
Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

**Protein Pathways:**

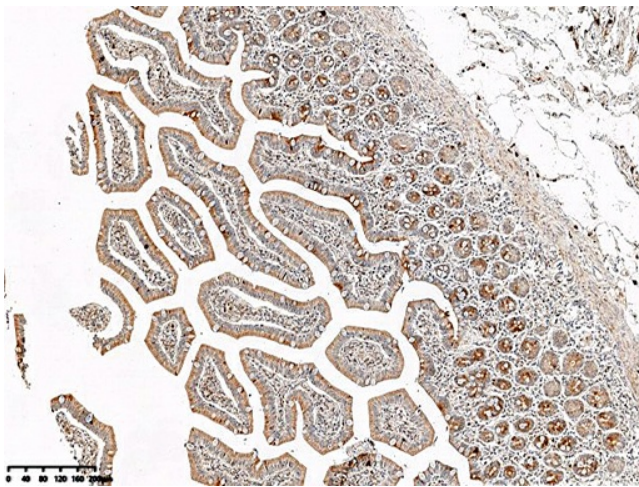
Adipocytokine signaling pathway, Galactose metabolism, Glycolysis / Gluconeogenesis, Insulin signaling pathway, Metabolic pathways, Starch and sucrose metabolism

**Product images:**

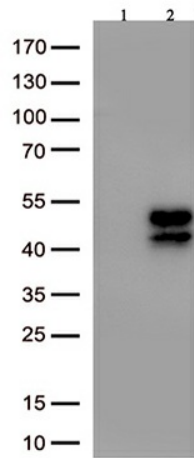
IHC staining of FFPE human kidney tissue within the normal limits using anti-G6PC rabbit monoclonal antibody (TA592780) and Polink-2 HRP polymer detection kit ([D22-110]). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 ([B04C-100]) at 120°C for 3 min. The brown stain indicates positive stain, blue is the counter stain.



IHC staining of FFPE human liver tissue within the normal limits using anti-G6PC rabbit monoclonal antibody (TA592780) and Polink-2 HRP polymer detection kit ([D22-110]). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 ([B04C-100]) at 120°C for 3 min. The brown stain indicates positive stain, blue is the counter stain.



IHC staining of FFPE human duodenum tissue within the normal limits using anti-G6PC rabbit monoclonal antibody (TA592780) and Polink-2 HRP polymer detection kit ([D22-110]). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 ([B04C-100]) at 120°C for 3 min. The brown stain indicates positive stain, blue is the counter stain.



Western blot analysis of overexpressed lysates from HEK293T cells transfected with empty plasmid ([PS100001], lane 1, 15ug) and human G6PC recombinant protein (lane 2, 100ng) using anti-G6PC antibody TA592780(1:2000).