



## Rabbit Anti-Glucose 6 phosphatase 2 antibody

SL13386R

<b>Product Name:</b>	Glucose 6 phosphatase 2
<b>Chinese Name:</b>	胰岛葡萄糖6磷酸酶2抗体
<b>Alias:</b>	G 6 Pase 2; G 6 Pase2; G6Pase 2; G6Pase2; G6PC 2; G6pc rs; G6pcrs; Glucose 6 phosphatase 2; Glucose 6 phosphatase, catalytic, 2; Glucose 6 phosphatase, catalytic, related; Glucose 6 phosphate catalytic 2; Islet specific G6CP related protein; Islet specific glucose 6 phosphatase; Islet specific glucose 6 phosphatase catalytic subunit related protein; G6PC2 HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Cow,Horse,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	41kDa
<b>Cellular localization:</b>	The cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Glucose 6 phosphatase 2/IGRP:31-130/355
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Glucose-6-phosphatase (G6Pase), is a multicomponent enzyme system that hydrolyzes glucose-6-phosphate in the final step of gluconeogenesis and gluconeolysis. G6Pase localizes to the endoplasmic reticulum, and while liver, kidney, and intestine are the

only tissues that express the first identified isoform, G6Pase- $\alpha$ , a second form, designated G6Pase- $\beta$ , contributes to blood glucose homeostasis in a wider range of tissues. Islet-specific G-6-Pase catalytic subunit-related protein (IGRP), a homolog of the catalytic subunit of G6Pase, may play a role in the regulation of islet metabolism and in insulin secretion induced by metabolites. The exact catalytic activity of IGRP is not defined. Identification of inhibitors of IGRP have potential therapeutic benefits for treatment of type 2 diabetes resulting from insulin secretion defects. Structurally, IGRP has been shown to be a glycoprotein held in the endoplasmic reticulum by nine transmembrane domains, which are then degraded in cells through the proteasome pathway generating MHC class I presented peptides.

**Function:**

IGRP (islet specific glucose 6 phosphatase catalytic subunit related protein), also known as G6PC2, belongs to the glucose-6-phosphatase catalytic subunit family. These enzymes are part of a multicomponent integral membrane system that catalyses the hydrolysis of glucose-6-phosphate. This hydrolysis is the terminal step in gluconeogenic and glycogenolytic pathways, and allows the release of glucose into the bloodstream. IGRP is found in pancreatic islets and does not exhibit phosphohydrolase activity. However, it is a major target of cell-mediated autoimmunity in diabetes.

**Subcellular Location:**

Endoplasmic reticulum membrane; Multi-pass membrane protein.

**Tissue Specificity:**

Specifically expressed in pancreas and also detected to a lower extent in testis. Expressed by most islet cells in the pancreas (at protein level).

**Post-translational modifications:**

N-glycosylated; the non-glycosylated form is more unstable and is degraded through the proteasome.

**Similarity:**

Belongs to the glucose-6-phosphatase family.

**SWISS:**

Q9NQR9

**Gene ID:**

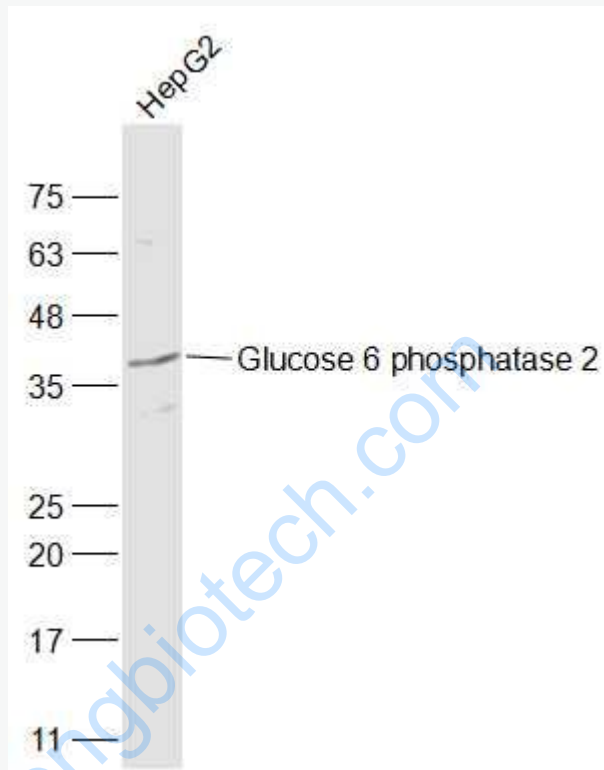
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**Database links:**

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

HepG2(Human) Cell Lysate at 30 ug

Primary: Anti-Glucose 6 phosphatase 2 (SL13386R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 41 kD

Observed band size: 41 kD