

Rabbit Anti-Glucose 6 phosphatase alpha antibody

SL4044R

Product Name:	Glucose 6 phosphatase alpha
Chinese Name:	葡萄糖6磷酸酶α/G6Pase-α抗体
Alias:	glucose-6-phosphatase, catalytic subunit; GSD1; AW107337; G-6-Pase; G6Pase; G6Pase-alpha; g6pc; G6PC_HUMAN; G6PT; Glucose-6-phosphatase alpha; Glucose-6-phosphatase; GSD1a; MGC163350; MGC93613; RP23-281C18.19.
	Specific References(1) SL4044R has been referenced in 1 publications.
文献引用	[IF=7.25]Yao, Chun, et al. "Role of FADD Phosphorylation in Regulating Glucose
Pub	Homeostasis: from Proteomic Discovery to Physiological Validation." Molecular &
:	Cellular Proteomics (2013). WB; Mouse.
	PubMed:23828893
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Sheep,
Applications:	ELISA=1:500-1000Flow-Cyt=0.2ug/test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	39kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Glucose 6 phosphatase alpha:81-180/357
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.

PubMed:

PubMed

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]

Function:

Hydrolyzes glucose-6-phosphate to glucose in the endoplasmic reticulum. Forms with the glucose-6-phosphate transporter (SLC37A4/G6PT) the complex responsible for glucose production through glycogenolysis and gluconeogenesis. Hence, it is the key enzyme in homeostatic regulation of blood glucose levels.

Subcellular Location:

Endoplasmic reticulum membrane; Multi-pass membrane protein.

Product Detail:

DISEASE:

Defects in G6PC are the cause of glycogen storage disease type 1A (GSD1A) [MIM:232200]. A metabolic disorder characterized by impairment of terminal steps of glycogenolysis and gluconeogenesis. Patients manifest a wide range of clinical symptoms and biochemical abnormalities, including hypoglycemia, severe hepatomegaly due to excessive accumulation of glycogen, kidney enlargement, growth retardation, lactic acidemia, hyperlipidemia, and hyperuricemia.

Similarity:

Belongs to the glucose-6-phosphatase family.

SWISS:

P35575

Gene ID:

2538

Database links:

Entrez Gene: 403492Dog

Entrez Gene: 2538Human

Entrez Gene: 14377Mouse

Entrez Gene: 25634Rat

SwissProt: O19133Dog

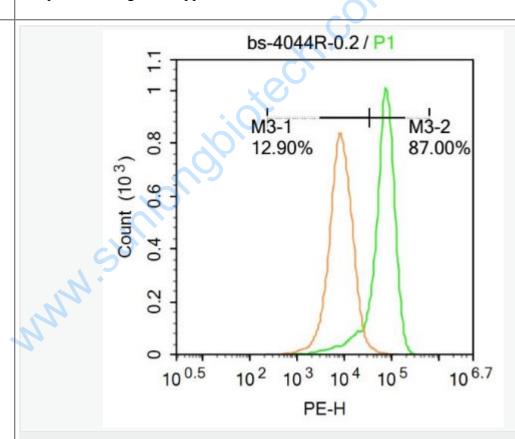
SwissProt: P35575Human

SwissProt: P35576Mouse

SwissProt: P43428Rat

Important Note:

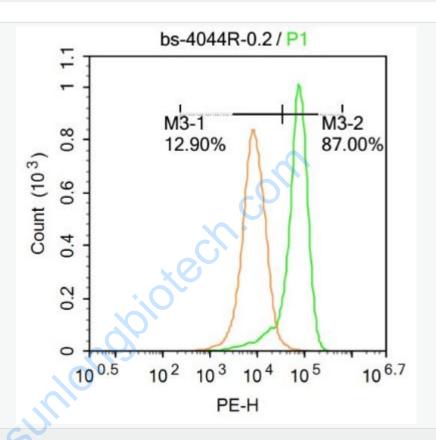
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

U-937 cells were incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with bs-4044R Antibody at 1:500 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2%BSA in PBS, followed by secondary antibody incubation for 40 min at room

temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and isotype control (orange).



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