

Datasheet for ABIN752998

**anti-G6PC antibody****1** Publication[Go to Product page](#)

## Overview

|              |   |
|--------------|---|
| Quantity:    | 100 µL  |
| Target:      | G6PC  |
| Reactivity:  | Human, Mouse, Rat, Dog, Cow, Pig  |
| Host:        | Rabbit  |
| Clonality:   | Polyclonal  |
| Conjugate:   | This G6PC antibody is un-conjugated   |
| Application: | Western Blotting (WB), Immunofluorescence (Paraffin-embedded Sections) (IF (p)),<br>Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)) |

## Product Details

|                   |   |
|-------------------|---|
| Immunogen:        | KLH conjugated synthetic peptide derived from human Glucose 6 phosphatase alpha |
| Isotype:          | IgG   |
| Cross-Reactivity: | Cow, Dog, Human, Mouse, Pig, Rat  |
| Purification:     | Purified by Protein A.  |

## Target Details

|                   |   |
|-------------------|---|
| Target:           | G6PC  |
| Alternative Name: | Glucose 6 phosphatase alpha ( <a href="#">G6PC Products</a> )   |
| Background:       | Synonyms: 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. |

## Target Details

Background: Glucose-6-phosphatase (G6Pase), is a multicomponent enzyme system that hydrolyzes glucose-6-phosphate (G6P) 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-i<sup>±</sup>, a second form, designated G6Pase-i<sup>2</sup>, contributes to blood glucose homeostasis in a wider range of tissues. G6Pase-i<sup>2</sup>, also known as SCN4, UGRP or G6PC3 (glucose 6 phosphatase, catalytic, 3), is a 346 amino acid endoplasmic reticulum multi-pass membrane protein that is involved in carbohydrate biosynthesis and the gluconeogenesis pathway. Inhibited by vanadate, G6Pase-i<sup>2</sup> hydrolyzes GP6 to glucose in the endoplasmic reticulum. Due to its necessary involvement in normal glucose metabolism, G6Pase-i<sup>2</sup> may play an integral role in diabetes and glycogen storage diseases (GSDs).

|                   |  |
|-------------------|--|
| Molecular Weight: | 40kDa  |
| Gene ID:          | 2538   |
| Pathways:         | <a href="#">Carbohydrate Homeostasis</a> , <a href="#">Cellular Glucan Metabolic Process</a> |

## Application Details

|                    |   |
|--------------------|---|
| Application Notes: | WB(1:100-500)<br>Optimal working dilution should be determined by the investigator. |
| Restrictions:      | For Research Use only   |

## Handling

|                    |  |
|--------------------|--|
| Format:            | Liquid   |
| Concentration:     | 1 µg/µL  |
| Buffer:            | Aqueous buffered solution containing 1 % BSA, 50 % glycerol and 0.09 % 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 at -20°C for 12 months.  |
| Expiry Date:       | 12 months  |

## Publications

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Product cited in: Yao, Zhuang, Du, Cheng, Yang, Guan, Hu, Zhu, Christine, Shi, Hua: "Role of Fas-associated death domain-containing protein (FADD) phosphorylation in regulating glucose homeostasis: from proteomic discovery to physiological validation." in: **Molecular & cellular proteomics : MCP**, Vol. 12, Issue 10, pp. 2689-700, (2013) ([PubMed](#)).