

Datasheet for 100-1156**Fructose-6-Phosphate Kinase Antibody****Overview**

Description:	Anti-Fructose-6-Phosphate Kinase (Rabbit Muscle) (GOAT) Antibody - 100-1156
Item No.:	100-1156
Size:	2 mL
Applications:	WB
Reactivity:	Rabbit
Host Species:	Goat

Product Details

Background:	Fructose-6-Phosphate Kinase -2 (F6PK) also known as Phosphofructokinase (PFK) catalyzes the conversion of ATP + D-fructose 6-phosphate to ADP + D-fructose 1,6-bisphosphate and therefore is a key enzyme in the control of glycolysis and carbohydrate degradation. This is a unidirectional and rate-limiting step in glycolysis. Allosteric kinetics control activation by ADP, AMP, or fructose bisphosphate and inhibition by ATP or citrate. The enzyme exists as a homotetramer.
Synonyms:	goat anti-Fructose-6-Phosphate Kinase Antibody, 6 Phosphofructokinase Muscle Type antibody, GSD7 antibody, MGC8699 antibody, PFKA antibody, PFKL antibody, PFKM antibody, PFKP antibody, PFKX antibody, Phosphofructo 1 Kinase Isozyme A antibody, Phosphofructokinase 1 antibody
Host Species:	Goat
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	PFKM
Reactivity:	Rabbit
Immunogen Type:	Native Protein
Immunogen:	Fructose-6-Phosphate Kinase [Rabbit Muscle]

Purity/Specificity: This product was prepared from monospecific antiserum by a delipidation and defibrination. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-goat serum, purified and partially purified Fructose-6-Phosphate Kinase [Rabbit Muscle]. Cross reactivity against Fructose-6-Phosphate Kinase from other sources may occur but has not been specifically determined.

Relevant Links:

- [UniProtKB - P00511](#)
- [NCBI - 125128](#)
- [GeneID - 100345647](#)

Application Details

Suggested Applications: WB (Based on references)

Application Note: This antibody suitable for use in ELISA, immunofluorescence microscopy and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 48 kDa in size corresponding to the processed mature form of F6PK protein by western blotting in the appropriate cell lysate or extract.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:4,000 - 1:20,000

WB: 1:500 - 1:2,000

Formulation

Physical State: Lyophilized

Concentration: 90 mg/mL by Refractometry

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.01% (w/v) Sodium Azide

Stabilizer: None

Reconstitution Volume: 2.0 mL

Reconstitution Buffer: Restore with deionized water (or equivalent)

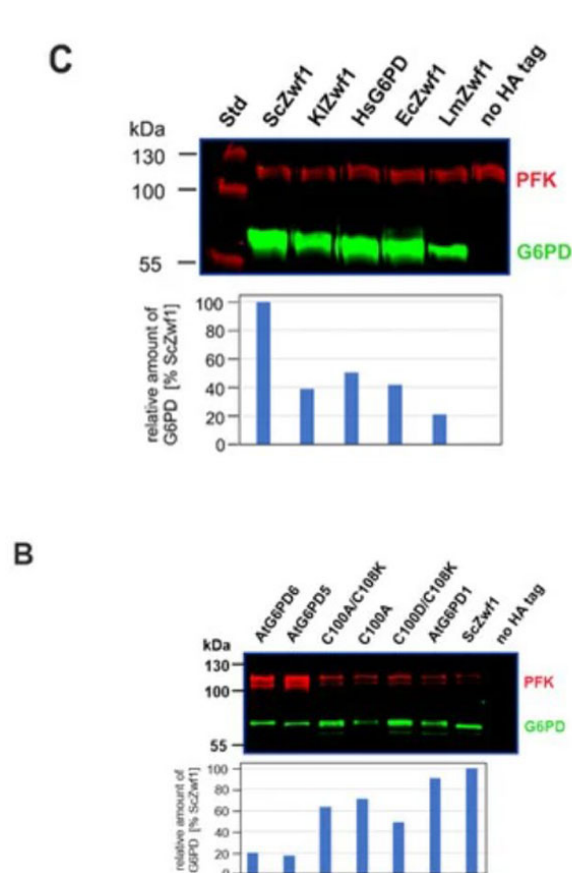
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Anti-PFK Antibody.

Construction of a yeast *zwf1* deletion strain, growth phenotypes and analysis of heterologously produced G6PD enzymes. (C) Western blot analysis of crude extracts from strain HOD269-1C (*zwf1::kanMX*) carrying the genes indicated on a CEN/ARS vector. The upper picture shows the results of the blot analyzed with the Odyssey scanner with anti-PFK shown in red and anti-HA detecting the tagged G6PD enzymes in green. Columns in the lower picture show the quantification of G6PD signals normalized to the amount of PFK detected for each lane in the Western blot, setting *ScZwf1* at 100%. Fig 1. PMID: 32283834.

Western Blot

Western Blot of Anti-PFK Antibody.

Analysis of a yeast *zwf1* deletion producing different G6PD isoforms from *Arabidopsis thaliana*. (B) Western blot of crude extracts from strains producing the indicated AtG6PD isoforms. The upper picture shows the results of the blot analyzed with the Odyssey scanner with anti-PFK shown in red and anti-HA detecting the tagged G6PD enzymes in green. Columns in the lower picture show the quantification of G6PD signals normalized to the amount of PFK detected for each lane in the Western blot, setting *ScZwf1* at 100%. Fig 4. PMID: 32283834.

References

- Heinisch, J.J. et al. Investigation of Heterologously Expressed Glucose-6-Phosphate Dehydrogenase Genes in a Yeast *zwf1* Deletion *Microorganisms* (2020)
- Nakamura et al. Molecular complex of three testis-specific isozymes associated with the mouse sperm fibrous sheath: hexokinase 1, phosphofructokinase M, and glutathione S-transferase mu class 5. *Biol Reprod.* (2010)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.