

Human/Mouse/Rat PGK1 Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5455

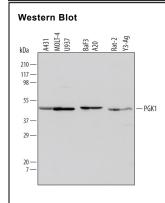
DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse and rat PGK1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	S. frugiperda insect ovarian cell line Sf 21-derived recombinant human PGK1 Met1-lle417 Accession # P00558
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	See Below

DATA



Detection of Human/Mouse/Rat PGK1 by Western Blot, Western blot shows lysates of A431 human epithelial carcinoma cell line, MOLT-4 human acute lymphoblastic leukemia cell line, U937 human histiocytic lymphoma cell line, BaF3 mouse pro-B cell line, A20 mouse B cell lymphoma cell line, Rat-2 rat embryonic fibroblast cell line, and Y3-Ag rat myeloid cell line. PVDF membrane was probed with 1 µg/mL of Human/Mouse/Rat PGK1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5455) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for PGK1 at approximately 43 to 45 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Decembitute at 0.2 mg/ml. in starile DDS
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
	*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- use a manual defrost freezer and avoid repeated freeze-thaw cycli
 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Phosphoglycerate kinase-1 (PGK1) is a glycolytic enzyme that catalyzes the conversion of 1,3-diphosphoglycerate to 3 phosphoglycerate. The gene encoding PGK1 is X-linked. Mutations of this gene may cause phosphoglycerate kinase deficiency, which is characterized by hemolytic anemia, muscle stiffness and mental retardation (1-3). PGK1 is induced by oxidative stress through the induction of hypoxia-inducible factor 1α and is a potential biomarker and therapeutic target for cancer (4-7).

References:

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- 3. Svaasand, E.K. et al. (2007) Muscle Nerve. 36:579.
- 4. Hwang, T.L. et al. (2006) Proteomics. 6:2259
- 5. Wang, J. et al. (2007) Cancer Res. 67:149.
- 6. Zieker, D. et al. (2008) Cell Physiol. Biochem. 21:429.
- 7. Jang, C.H. et al. (2008) Biosci. Biotechnol. Biochem. 72:1799.

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