

DESCRIPTION

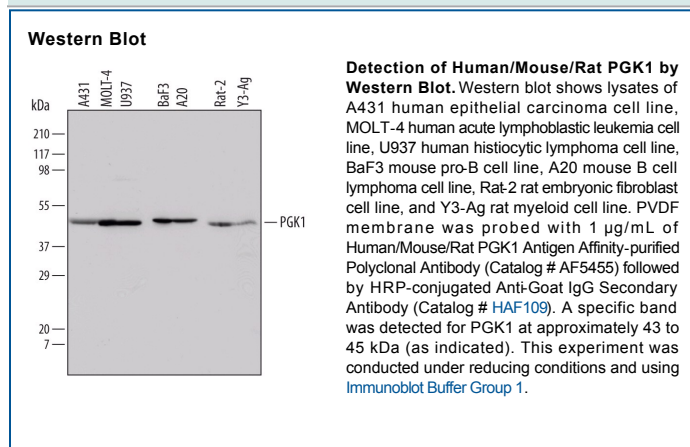
Species Reactivity	Human/Mouse/Rat
Specificity	Detects endogenous human, mouse and rat PGK1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human PGK1 Met1-Ile417 Accession # P00558
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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



PREPARATION AND STORAGE

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.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

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:

1. Beutler, E. (2002) *Br. J. Haematol.* **136**:3.
2. Flanagan, J.M. *et al.* (2006) *Br. J. Haematol.* **134**:233.
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.