

## Basic Information

Product Name	Anti-PGK1 Antibody	
Gene Name	PGK1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PGK1 (312-337aa MGLDCGPESKKYAEAVTRAKQIVWN), different from the related mouse and rat sequences by two amino acids.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	43KD	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow cytometry (FCM):	1-3 µg/1x10 <sup>6</sup> cells

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

PGK1 (Phosphoglycerate Kinase 1), also known as PGKA, is an enzyme that in humans is encoded by the PGK1 gene. The protein encoded by this gene is a glycolytic enzyme that catalyzes the conversion of 1,3-diphosphoglycerate to 3-phosphoglycerate. The encoded protein may also act as a cofactor for polymerase alpha. Additionally, this protein is secreted by tumor cells where it participates in angiogenesis by functioning to reduce disulfide bonds in the serine protease, plasmin, which consequently leads to the release of the tumor blood vessel inhibitor angiostatin. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Deficiency of the enzyme is associated with a wide range of clinical phenotypes hemolytic anemia and neurological impairment. Pseudogenes of this gene have been defined on chromosomes 19, 21 and the X chromosome.

## Selected Validation Data

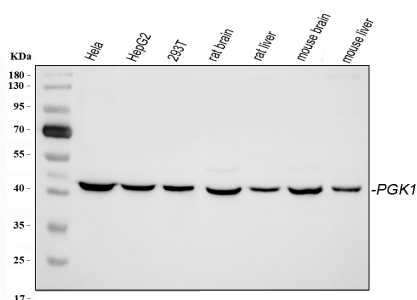


Figure 1. Western blot analysis of anti- PGK1 antibody (PB0824).

The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,

Lane 2: HepG2 whole cell lysates,

Lane 3: 293T whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: rat liver tissue lysates,

Lane 6: mouse brain tissue lysates,

Lane 7: mouse liver tissue lysates.

Use rabbit anti- PGK1 1:1000, probed with a goat anti-rabbit IgG-

HRP secondary antibody. The signal is developed using an

Enhanced Chemiluminescent detection (ECL) kit (Catalog #

EK1002). A specific band was detected for PGK1 at approximately

43KD. The expected band size for PGK1 is at 45KD.