

Human/Mouse/Rat PCK1 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF7316

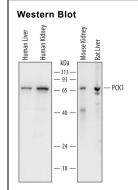
DESCRIPTION			
Species Reactivity	Human/Mouse/Rat		
Specificity	Detects human, mouse, rat PCK1 in Western blots, and detects recombinant human PCK1 in direct ELISAs. In direct ELISAs, less than 3% cross-reactivity with recombinant mouse PCK1 is observed.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	E. coli-derived recombinant human PCK1 Met1-Ile88 Accession # P35558		
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, and Rat PCK1 by Western Blot. Western blot shows lysates of human liver tissue, human kidney tissue, mouse kidney tissue, and rat liver tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human/Mouse/Rat PCK1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7316) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PCK1 at approximately 68 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.

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

- 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

PCK1 (Phosphoenolpyruvate carboxykinase, cytosolic; also PEPCK-C) is a 67-69 kDa cytosolic member of the phosphoenolpyruvate kinase (GTP) family of enzymes. It is found in hepatocytes, adipocytes, intestinal and renal proximal tubule epithelial cells. PCK1 is one of two enzymes that drive the conversion of oxaloacetate plus GTP into PEP, GDP and CO₂. The PEP generated in this reaction forms glucose via fructose phosphate intermediates. The other enzyme that has this activity is termed PEPCK-M and found in mitochondria. Human PCK1 is 622 amino acids (aa) in length. It contains a large catalytic region (aa 27-615) and three utilized acetylation sites. There is one potential alternative start site at Met315. Over aa 1-88, human PCK1 shares 80% aa sequence identity with mouse PCK1.

