

## DESCRIPTION

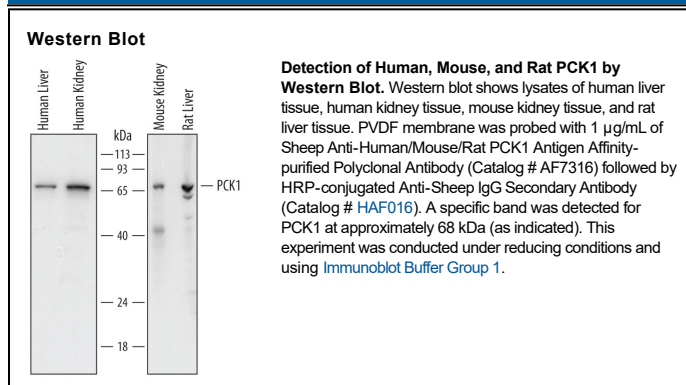
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, rat PCK1 in Western blots, and detects recombinant human PCK1 in direct ELISAs. In direct ELISAs, less than 3% cross-reactivity with recombinant mouse PCK1 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PCK1 Met1-Ile88 Accession # P35558
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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 CO<sub>2</sub>. 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.