

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse, and rat PKLR in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human PKM-2 is observed.
<b>Source</b>	Polyclonal Rabbit IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PKLR Leu47-Ser574 Accession # P30613
<b>Formulation</b>	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

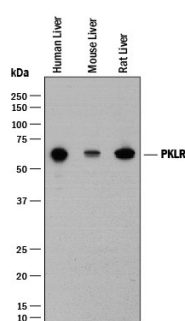
## APPLICATIONS

**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>	1:1000 dilution	See Below
<b>Simple Western</b>	0.5 µg/mL	Human Liver and Mouse Liver

## DATA

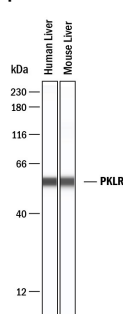
### Western Blot



#### Detection of Human, Mouse, and Rat PKLR by Western Blot.

Western blot shows lysates of human liver tissue, mouse liver tissue, and rat liver tissue. PVDF membrane was probed with 1:1000 dilution of Rabbit Anti-Human/Mouse/Rat PKLR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8519) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for PKLR at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Simple Western



#### Detection of Human and Mouse PKLR by Simple Western™.

Simple Western lane view shows lysates of human liver and mouse liver, loaded at 0.2 mg/mL. A specific band was detected for PKLR at approximately 57 kDa (as indicated) using 0.5 µg/mL of Rabbit Anti-Human/Mouse/Rat PKLR Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8519). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. 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 opening.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after opening.</li> </ul>

## BACKGROUND

Human PKLR (Pyruvate kinase PKLR) is a 60 kDa, cytosolic red cell/liver pyruvate kinase that belongs to the pyruvate kinase family of proteins. It is 574 amino acids (aa) in length, and contains two Allosteric activator binding regions. PKLR is allosterically activated by fructose 1,6-bisphosphate. Pyruvate kinase-deficient patients suffer from a highly variable degree of chronic hemolysis, ranging from severe neonatal jaundice and fatal anemia at birth, severe transfusion-dependent chronic hemolysis, moderate hemolysis with exacerbation during infection, to a fully compensated hemolysis without apparent anemia. Additional shorter isoform apparently exists. It is 543 aa in length and shows a two aa substitution for aa's 1-33. Human PKLR is 93% aa identical to mouse and rat PKLR.

## PRODUCT SPECIFIC NOTICES

\* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.