

# PKLR Recombinant monoclonal antibody, PBS Only (Detector)

Catalog Number: 86485-1-PBS

## Basic Information

<b>Catalog Number:</b> 86485-1-PBS	<b>GenBank Accession Number:</b> BC025737	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5313	<b>CloneNo.:</b> 251231F12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P30613	
<b>Isotype:</b> IgG	<b>Full Name:</b> pyruvate kinase, liver and RBC	
<b>Immunogen Catalog Number:</b> AG17933	<b>Calculated MW:</b> 574 aa, 62 kDa	
	<b>Observed MW:</b> 58-62 kDa	

## Applications

**Tested Applications:**  
WB, Sandwich ELISA, Indirect ELISA

**Species Specificity:**  
human

## Product Information

86485-1-PBS targets PKLR as part of a matched antibody pair:

MP02639-1: 86485-2-PBS capture and 86485-1-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

PKLR (Pyruvate kinase isozymes R/L) is also named as PK1, PKL, which is a glycolytic enzyme that catalyzes the transphosphorylation from phosphoenolpyruvate (PEP) to ADP, yielding pyruvate and ATP. It is the last step of the glycolytic pathway and is essentially irreversible. It belongs to the pyruvate kinase family and there are 4 isozymes of pyruvate kinase in mammals: L, R, M1 and M2. L type is major isozyme in the liver, R is found in red cells, M1 is the main form in muscle, heart and brain, and M2 is found in early fetal tissues. Defects in PKLR are the cause of pyruvate kinase hyperactivity (PKHYP) and pyruvate kinase deficiency of red cells (PKRD). It can form a homotetramer (PMID:11960989).

## Storage

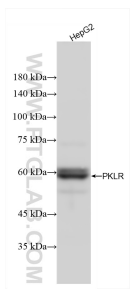
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

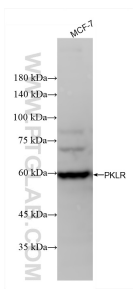
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

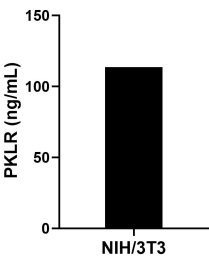
Selected Validation Data



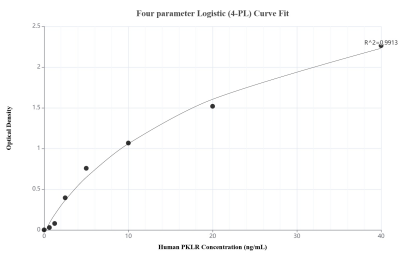
HepG2 cells were subjected to SDS PAGE followed by western blot with 86485-1-RR (PKLR antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86485-1-PBS in a different storage buffer formulation.



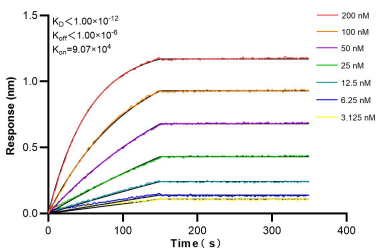
MCF-7 cells were subjected to SDS PAGE followed by western blot with 86485-1-RR (PKLR antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86485-1-PBS in a different storage buffer formulation.



The mean PKLR concentration was determined to be 113.54 ng/mL in NIH/3T3 cell extract based on a 1.20 mg/mL extract load.



Sandwich ELISA standard curve of MP02639-1, Human PKLR Recombinant Matched Antibody Pair - PBS only. 86485-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag17933. 86485-1-PBS was HRP conjugated as the detection antibody. Range: 0.625-40 ng/mL.



Biolayer interferometry (BLI) kinetic assays of 86485-1-RR against Human PKLR were performed. The affinity constant is below 1 pM.