

For Research Use Only

# PDK4 Recombinant antibody

Catalog Number: 83583-1-RR



## Basic Information

Catalog Number:

83583-1-RR

Size:

1000 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3629

GenBank Accession Number:

BC040239

GeneID (NCBI):

5166

UNIPROT ID:

Q16654

Full Name:

pyruvate dehydrogenase kinase,  
isozyme 4

Calculated MW:

411 aa, 46 kDa

Observed MW:

46 kDa

Purification Method:

Protein A purification

CloneNo.:

240551E4

Recommended Dilutions:

WB 1:2000-1:10000

## Applications

Tested Applications:

WB, FC (Intra), ELISA

Species Specificity:

human, mouse

Positive Controls:

WB : mouse kidney tissue, mouse lung tissue

## Background Information

Pyruvate dehydrogenase kinase isoform4 (PDK4) is also named as PDHK4 and belongs to the PDK/BCKDK protein kinase family. It is upregulated by starvation in many tissues of the body during starvation. This causes inactivation of the pyruvate dehydrogenase complex which blocks pyruvate oxidation and conserves lactate and alanine for gluconeogenesis. Enhanced PDK4 expression may be caused by the increase in free fatty acids that occurs during starvation. Free fatty acids can activate peroxisome proliferator-activated receptor  $\alpha$  (PPAR  $\alpha$ ), and activation of PPAR  $\alpha$  can promote PDK4 expression (PMID: 11554740).

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

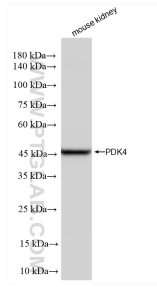
T: 4006900926

E: Proteintech-CN@ptglab.com

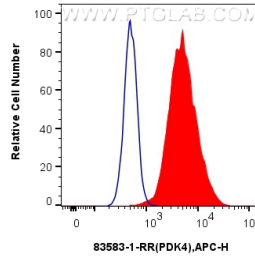
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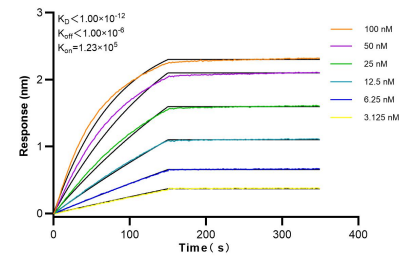
## Selected Validation Data



mouse kidney tissue were subjected to SDS PAGE followed by western blot with 83583-1-RR (PDK4 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug PDK4 Recombinant antibody (83583-1-RR, Clone:240551E4) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLI) kinetic assays of 83583-1-RR against Human PDK4 were performed. The affinity constant is below 1 pM.