

For Research Use Only

# Phospho-PDH E1 Alpha (Ser300) Recombinant antibody, PBS Only



Catalog Number: 80572-1-PBS

## Basic Information

<b>Catalog Number:</b> 80572-1-PBS	<b>GenBank Accession Number:</b> BC002406	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1 mg/ml	<b>GeneID (NCBI):</b> 5160	<b>CloneNo.:</b> 2E19
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P08559	
<b>Isotype:</b> IgG	<b>Full Name:</b> pyruvate dehydrogenase (lipoamide) alpha 1	
	<b>Calculated MW:</b> 43 kDa	
	<b>Observed MW:</b> 40 kDa	

## Applications

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

**Species Specificity:**  
Human, mouse, rat

## Background Information

PDH E1 Alpha (PDHA1), as the major component of PDH, can be phosphorylated and inactivated by PDHK1. PDHA1 contains three serine residues (Ser232, Ser293, or Ser300) that can be reversibly phosphorylated by a dedicated family of four inhibitory pyruvate dehydrogenase kinases (PDHK1-4) and two reactivating phosphatases (PDP1, 2). Hypoxia induces the expression of PDHK1 and PDHK3 and hyperphosphorylates PDHA1. Phosphorylated PDHA1 inactivates the whole pyruvate dehydrogenase complex (PDC), reduces pyruvate entering into the tricarboxylic acid (TCA) cycle for oxidative phosphorylation, enhances the Warburg effect and promotes tumorigenesis. (PMID: 30993888, PMID: 34749809)

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

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

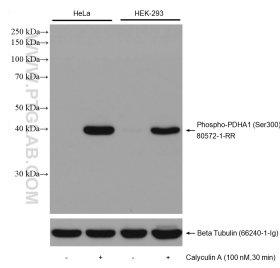
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

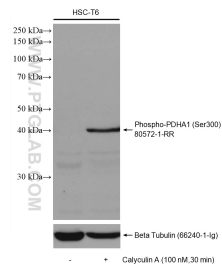
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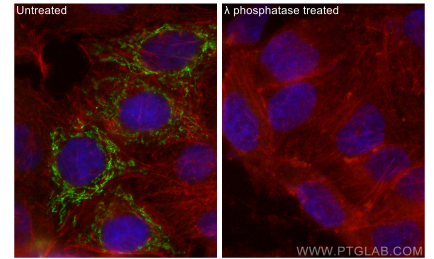
## Selected Validation Data



Non-treated and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 80572-1-RR (Phospho-PDH E1 Alpha (Ser300) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Tubulin antibody as loading control. This data was developed using the same antibody clone with 80572-1-PBS in a different storage buffer formulation.



Non-treated and Calyculin A treated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 80572-1-RR (Phospho-PDH E1 Alpha (Ser300) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Tubulin antibody as loading control. This data was developed using the same antibody clone with 80572-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed  $\lambda$  phosphatase treated HepG2 cells using Phospho-PDH E1 Alpha (Ser300) antibody (80572-1-RR, Clone: 2E19) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 80572-1-PBS in a different storage buffer formulation.