

For Research Use Only

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

Catalog Number: 80572-1-PBS



Basic Information

Catalog Number: 80572-1-PBS	GenBank Accession Number: BC002406	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 5160	CloneNo.: 2E19
Source: Rabbit	UNIPROT ID: P08559	
Isotype: IgG	Full Name: pyruvate dehydrogenase (lipoamide) alpha 1	
	Calculated MW: 43 kDa	
	Observed MW: 40 kDa	

Applications

Tested Applications:
WB, IF/ICC, Indirect ELISA

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

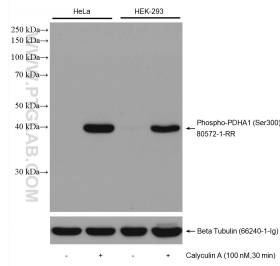
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free
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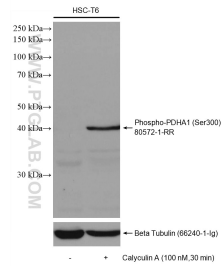
E: proteintech@ptglab.com
W: ptglab.com

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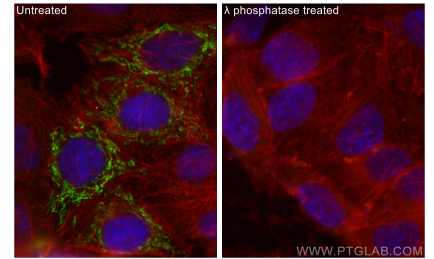
Selected Validation Data



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 λ 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.