

For Research Use Only

CoraLite® Plus 488-conjugated Phospho-PDH E1 Alpha (Ser232) Recombinant antibody

Catalog Number: CL488-81491



Basic Information

Catalog Number:

CL488-81491

Concentration:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC002406

GeneID (NCBI):

5160

UNIPROT ID:

P08559

Full Name:

pyruvate dehydrogenase (lipoamide)
alpha 1

Calculated MW:

43 kDa

Observed MW:

40 kDa

Purification Method:

Protein A purification

CloneNo.:

1L22

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

FC (Intra)

Species Specificity:

human

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 -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

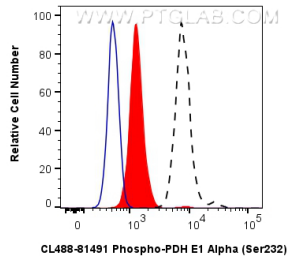
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



1x10⁶ HEK-293 cells untreated (dashed lines) or treated with λ phosphatase which intracellularly stained with 0.13 ug CoraLite® Plus 488 Phospho-PDH E1 Alpha (Ser232) Recombinant Antibody (CL488-81491, Clone:1L22)(red), or 0.13 ug CoraLite® Plus 488 Rabbit IgG Isotype Control RecAb (CL488-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.