ARG40309
anti-PDP1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PDP1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PDP1
Species	Human
Immunogen	Recombinant fusion protein corresponding to aa. 72-260 of Human PDP1 (NP_060914.2).
Conjugation	Un-conjugated
Alternate Names	PDPC; PDPC 1; PDP; EC 3.1.3.43; Protein phosphatase 2C; PDH; PDP 1; PPM2C; [Pyruvate dehydrogenase [acetyl-transferring]]-phosphatase 1, mitochondrial; Pyruvate dehydrogenase phosphatase catalytic subunit 1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
WB	1:500 - 1:2000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	U-87MG, Mouse heart and Rat heart
Observed Size	~ 60 kDa

Properties

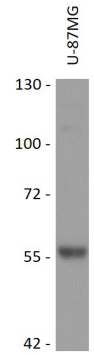
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

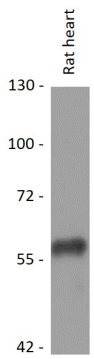
Gene Symbol	PDP1
Gene Full Name	pyruvate dehyrogenase phosphatase catalytic subunit 1
Background	Pyruvate dehydrogenase (E1) is one of the three components (E1, E2, and E3) of the large pyruvate dehydrogenase complex. Pyruvate dehydrogenase kinases catalyze phosphorylation of serine residues of E1 to inactivate the E1 component and inhibit the complex. Pyruvate dehydrogenase phosphatases catalyze the dephosphorylation and activation of the E1 component to reverse the effects of pyruvate dehydrogenase kinases. Pyruvate dehydrogenase phosphatase is a heterodimer consisting of catalytic and regulatory subunits. Two catalytic subunits have been reported; one is predominantly expressed in skeletal muscle and another one is is much more abundant in the liver. The catalytic subunit, encoded by this gene, is the former, and belongs to the protein phosphatase 2C (PP2C) superfamily. Along with the pyruvate dehydrogenase complex and pyruvate dehydrogenase kinases, this enzyme is located in the mitochondrial matrix. Mutation in this gene causes pyruvate dehydrogenase phosphatase deficiency. Multiple alternatively spliced transcript variants encoding different isoforms have been identified.[provided by RefSeq, Jun 2009]
Function	Catalyzes the dephosphorylation and concomitant reactivation of the alpha subunit of the E1 component of the pyruvate dehydrogenase complex. [UniProt]
Calculated Mw	61 kDa
Cellular Localization	Mitochondrion matrix. [UniProt]

Images



ARG40309 anti-PDP1 antibody WB image

Western blot: 25 µg of U-87MG cell lysate stained with ARG40309 anti-PDP1 antibody at 1:3000 dilution.



ARG40309 anti-PDP1 antibody WB image

Western blot: 25 µg of Rat heart lysate stained with ARG40309 anti-PDP1 antibody at 1:3000 dilution.