

# Product datasheet

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ARG40409 anti-PDP1 antibody

Package: 50 μl Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes PDP1

Tested Reactivity Hu

Tested Application IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name PDP1

Species Human

Immunogen Fusion protein of Human PDP1.

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
	IHC-P	1:25 - 1:100
	WB	1:200 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	WB: Human bladder carcinoma tissue. IHC-P: Human thyroid cancer and Human cervical cancer.	
Observed Size	~ 60 kDa	

### **Properties**

Form Liquid

**Purification** Affinity purification with immunogen.

Buffer PBS (pH 7.4), 0.05% Sodium azide and 40% Glycerol.

Preservative 0.05% Sodium azide

Stabilizer 40% Glycerol

Concentration 1.3 mg/ml

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

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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]

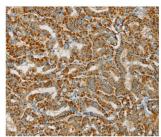
Calculated Mw

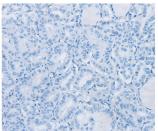
61 kDa

**Cellular Localization** 

Mitochondrion matrix. [UniProt]

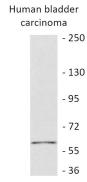
### **Images**





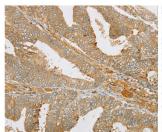
#### ARG40409 anti-PDP1 antibody IHC-P image

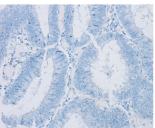
Immunohistochemistry: Paraffin-embedded Human thyroid cancer tissue stained with ARG40409 anti-PDP1 antibody (left) at 1:25 dilution, or the same antibody pre-incubated with fusion protein (right).



#### ARG40409 anti-PDP1 antibody WB image

Western blot:  $40 \mu g$  of Human bladder carcinoma tissue lysate stained with ARG40409 anti-PDP1 antibody at 1:300 dilution.





# ARG40409 anti-PDP1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human cervical cancer tissue stained with ARG40409 anti-PDP1 antibody (left) at 1:25 dilution, or the same antibody pre-incubated with fusion protein (right).