

DPH1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16559b

Specification

DPH1 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>Q9BZG8</u>
Other Accession	<u>NP_001374.3</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	48134
Antigen Region	384-412

DPH1 Antibody (C-term) - Additional Information

Gene ID 1801

Other Names

Diphthamide biosynthesis protein 1, DPH1 homolog, HsDph1, Diphthamide biosynthesis protein 2 homolog-like 1, DPH-like 1, DPH2-like 1, Diphthamide biosynthesis protein 2-like, Ovarian cancer-associated gene 1 protein, DPH1, DPH2L, DPH2L1, OVCA1

Target/Specificity

This DPH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 384-412 amino acids from the C-terminal region of human DPH1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

DPH1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

DPH1 Antibody (C-term) - Protein Information

Name DPH1 {ECO:0000303|PubMed:26220823}



Function Catalyzes the first step of diphthamide biosynthesis, a post- translational modification of histidine which occurs in elongation factor 2 (PubMed:<u>30877278</u>). DPH1 and DPH2 transfer a 3-amino-3- carboxypropyl (ACP) group from S-adenosyl-L-methionine (SAM) to a histidine residue, the reaction is assisted by a reduction system comprising DPH3 and a NADH-dependent reductase (By similarity). Acts as a tumor suppressor (PubMed:<u>10519411</u>).

Cellular Location

Nucleus. Cytoplasm. Note=Punctate, primarily perinuclear localization.

Tissue Location

Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, pancreas, spleen, thymus, mammary gland, colon, small intestine, testis and ovary. Reduced expression in primary breast and ovarian tumors.

DPH1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

DPH1 Antibody (C-term) - Images



DPH1 Antibody (C-term) (Cat. #AP16559b) western blot analysis in A375 cell line lysates (35ug/lane).This demonstrates the DPH1 antibody detected the DPH1 protein (arrow).

DPH1 Antibody (C-term) - Background

Diphthamide is a unique posttranslationally modified histidine found only in translation elongation factor-2 (EEF2; MIM 130610). This modification is conserved from archaebacteria to humans and serves as the target for ADP-ribosylation and inactivation of EEF2 by diphtheria toxin (DT) and Pseudomonas exotoxin A. DPH1 is 1 of several enzymes involved in synthesis of



diphthamide in EEF2 (Liu et al., 2004 [PubMed 15485916]).[supplied by OMIM].

DPH1 Antibody (C-term) - References

Liu, S., et al. Mol. Cell. Biol. 24(21):9487-9497(2004) Cardoso, C., et al. Am. J. Hum. Genet. 72(4):918-930(2003) Chen, C.M., et al. Biochem. Biophys. Res. Commun. 286(5):1019-1026(2001) Salicioni, A.M., et al. Genomics 69(1):54-62(2000) Bruening, W., et al. Cancer Res. 59(19):4973-4983(1999)