

DPH1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP16559b**Specification**

DPH1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9BZG8](#)**DPH1 Antibody (C-term) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

DPH1 Antibody (C-term) Blocking Peptide - 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:30877278). 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:10519411).

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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

DPH1 Antibody (C-term) Blocking Peptide - Images

DPH1 Antibody (C-term) Blocking Peptide - Background

Diphthamide is a unique posttranslationally modified histidine found only in translation elongation factor-2 (EEF2; MIM130610). This modification is conserved from archaeobacteria 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) Blocking Peptide - 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)