

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

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**DPH1 Antibody (C-term) Blocking Peptide - Product Information**Primary 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:<a href="http://www.uniprot.org/citations/30877278" target="\_blank">30877278</a>). 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:<a href="http://www.uniprot.org/citations/10519411" target="\_blank">10519411</a>).

**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)