

# **DHPS Antibody (N-term) Blocking Peptide**

Synthetic peptide Catalog # BP17057a

# **Specification**

# **DHPS Antibody (N-term) Blocking Peptide - Product Information**

Primary Accession

P49366

# DHPS Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 1725** 

#### **Other Names**

Deoxyhypusine synthase, DHS, DHPS, DS

## **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.

# **DHPS Antibody (N-term) Blocking Peptide - Protein Information**

Name DHPS

Synonyms DS

## **Function**

Catalyzes the NAD-dependent oxidative cleavage of spermidine and the subsequent transfer of the butylamine moiety of spermidine to the epsilon-amino group of a critical lysine residue of the eIF-5A precursor protein to form the intermediate deoxyhypusine residue (PubMed:<a href="http://www.uniprot.org/citations/30661771" target="\_blank">30661771</a>/a>). This is the first step of the post-translational modification of that lysine into an unusual amino acid residue named hypusine. Hypusination is unique to mature eIF-5A factor and is essential for its function.

# **DHPS Antibody (N-term) Blocking Peptide - Protocols**

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

• Blocking Peptides

# **DHPS Antibody (N-term) Blocking Peptide - Images**



# DHPS Antibody (N-term) Blocking Peptide - Background

The unusual amino acid hypusine is formedposttranslationally and is only found in a single cellular protein, eukaryotic translation initiation factor 5A. In the first step of hypusine biosynthesis, deoxyhypusine synthase catalyzes the NAD-dependent transfer of the butylamine moiety of spermidine to the epsilon-amino group of a specific lysine residue of the EIF5A precursor protein to form the intermediate deoxyhypusine residue. This gene consists of nine exons spanning 6.6 kb. Three transcript variants have been isolated. However, only transcript variant 1 encodes an active protein. The shorter variants may act as modulating factors of DHPS activity.

# **DHPS Antibody (N-term) Blocking Peptide - References**

Venkatesan, K., et al. Nat. Methods 6(1):83-90(2009)Alker, A.P., et al. Trop. Med. Int. Health 13(11):1384-1391(2008)Matsuoka, S., et al. Science 316(5828):1160-1166(2007)Lamesch, P., et al. Genomics 89(3):307-315(2007)Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007):