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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:30661771). 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

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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 ofhypusine biosynthesis, deoxyhypusine synthase catalyzes theNAD-dependent transfer of the butylamine moiety of spermidine tothe epsilon-amino group of a specific lysine residue of the EIF5Aprecursor protein to form the intermediate deoxyhypusine residue.This gene consists of nine exons spanning 6.6 kb. Three transcriptvariants have been isolated. However, only transcript variant 1encodes an active protein. The shorter variants may act asmodulating 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) :