10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

DHPS Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP17057a

Specification

DHPS Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	P49366
Other Accession	NP_001921.1, NP_037538.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**16-43**

DHPS Antibody (N-term) - Additional Information

Gene ID 1725

Other Names
Deoxyhypusine synthase, DHS, DHPS, DS

Target/Specificity
This DHPS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-43 amino acids from the N-terminal region of human DHPS.

Dilution
WB~~1:1000

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

DHPS Antibody (N-term) - Protein Information

Name DHPS

Synonyms DS

Function Catalyzes the NAD-dependent oxidative cleavage of spermidine and the subsequent

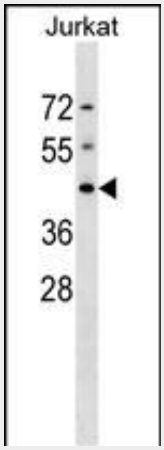
transfer of the butylamine moiety of spermidine to the epsilon-amino group of a critical lysine residue of the eIF-5A precursor protein to form the intermediate deoxyhypusine residue (PubMed:30661771). This is the first step of the post-translational modification of that lysine into an unusual amino acid residue named hypusine. Hypusination is unique to mature eIF-5A factor and is essential for its function.

DHPS Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

DHPS Antibody (N-term) - Images



DHPS Antibody (N-term) (Cat. #AP17057a) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the DHPS antibody detected the DHPS protein (arrow).

DHPS Antibody (N-term) - Background

The unusual amino acid hypusine is formed posttranslationally 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) - 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) :