

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
Host
Clonality
Polyclonal
Isotype
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
Antigen Region

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

E~~Use at an assay dependent concentration.

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



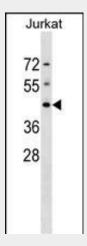
Function Catalyzes the NAD-dependent oxidative cleavage of spermidine and the subsequent transfer of the butylamine moiety of spermidine to the epsilon-amino group of a critical lysine residue of the eIF-5A precursor protein to form the intermediate deoxyhypusine residue (PubMed:30661771). This is the 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
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

DHPS Antibody (N-term) - Images

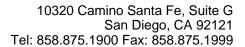


DHPS Antibody (N-term) (Cat. #AP17057a) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the DHPS antibody detected the DHPS protein (arrow).

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):