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DHPS Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17057a

Product Information

Application	WB, E
Primary Accession	P49366
Other Accession	NP_001921.1, NP_037538.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36905
Calculated MW	40971
Antigen Region	16-43

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.

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.

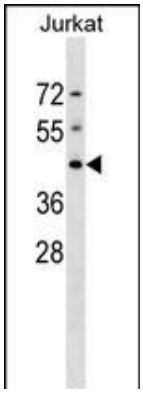
Background

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.

References

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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) :

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.