

Datasheet for ABIN3078892

DHPS Protein (AA 1-369) (Strep Tag)



Overview

Quantity:	1 mg
Target:	DHPS
Protein Characteristics:	AA 1-369
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DHPS protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Sequence:

MEGSLEREAP AGALAAVLKH SSTLPPESTQ VRGYDFNRGV NYRALLEAFG TTGFQATNFG
RAVQQVNAMI EKKLEPLSQD EDQHADLTQS RRPLTSCTIF LGYTSNLISS GIRETIRYLV
QHNMVDVLVT TAGGVEEDLI KCLAPTYLGE FSLRGKELRE NGINRIGNLL VPNENYCKFE
DWLMPILDQM VMEQNTEGVK WTPSKMIARL GKEINNPESV YYWAQKNHIP VFSPALTDGS
LGDMIFFHSY KNPGLVLDIV EDLRLINTQA IFAKCTGMII LGGGVVKHHI ANANLMRNGA
DYAVYINTAQ EFDGSDSGAR PDEAVSWGKI RVDAQPVKVY ADASLVFPLL VAETFAQKMD
AFMHEKNED

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

• Made in Germany - from design to production - by highly experienced protein experts.

- · Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for
 protein production are removed, leaving only the protein production machinery and the
 mitochondria to drive the reaction. During our lysate completion steps, the additional
 components needed for protein production (amino acids, cofactors, etc.) are added to
 produce something that functions like a cell, but without the constraints of a living system all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).		
Purity:	> 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).		
Target Details			
Target:	DHPS		
Alternative Name:	DHPS (DHPS Products)		
Background:	Deoxyhypusine synthase (DHS) (EC 2.5.1.46),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. {ECO:0000269|PubMed:30661771}.

Molecular Weight:

41.0 kDa

UniProt:

P49366

Application Details

Application Notes:

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment:

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Restrictions:

For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.

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Expiry Date:

Unlimited (if stored properly)