

Datasheet for ABIN3085890  
**PELO Protein (AA 1-385) (Strep Tag)**



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1 Image

Overview

Quantity:	1 mg
Target:	PELO
Protein Characteristics:	AA 1-385
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PELO protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MKLVRKNIK DNAGQVTLVP EEPEDMWHTY NLVQVGDSL R ASTIRKVQTE SSTGSGVSNR  
VRTTLTLCVE AIDFDSQACQ LRVKGTNIQE NEYVKMGAYH TIELEPNRQF TLAKKQWDSV  
VLERIEQACD PAWSADVA AV VMQEGLAHIC LVTPSMTLTR AKVEVNIPRK RKGNC SQHDR  
ALERFYEQVV QAIQRHIHFD VVKCILVASP GFVREQFCDY LFQQAVKTDN KLLLENRSKF  
LQVHASSGHK YSLKEALCDP TVASRLSDTK AAGEVKALDD FYKMLQHEPD RAFYGLKQVE  
KANEAMAIDT LLISDELFRH QDVATRSRYV RLVD SVKENA GTVRIFSSLH VSQEQLS QLT  
GVAAILRFPV PELSDQEGDS SSEED

**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:
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- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 post-translational 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 in several dilutions and is measured against its specific reference buffer.
- We use the Exspasy's ProtParam tool to determine the absorption coefficient of each protein.

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#### Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

## Product Details

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Purity:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

## Target Details

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Target:	PELO
Alternative Name:	PELO ( <a href="#">PELO Products</a> )
Background:	<p>Protein pelota homolog (hPelota) (Protein Dom34 homolog),FUNCTION: Component of the Pelota-HBS1L complex, a complex that recognizes stalled ribosomes and triggers the No-Go Decay (NGD) pathway (PubMed:21448132, PubMed:23667253, PubMed:27543824, PubMed:27863242). In the Pelota-HBS1L complex, PELO recognizes ribosomes stalled at the 3' end of an mRNA and engages stalled ribosomes by destabilizing mRNA in the mRNA channel (PubMed:27543824, PubMed:27863242). Following mRNA extraction from stalled ribosomes by the SKI complex, the Pelota-HBS1L complex promotes recruitment of ABCE1, which drives the disassembly of stalled ribosomes, followed by degradation of damaged mRNAs as part of the NGD pathway (PubMed:21448132, PubMed:32006463). As part of the PINK1-regulated signaling, upon mitochondrial damage is recruited to the ribosome/mRNA-ribonucleoprotein complex associated to mitochondrial outer membrane thereby enabling the recruitment of autophagy receptors and induction of mitophagy (PubMed:29861391).</p> <p>{ECO:0000269 PubMed:21448132, ECO:0000269 PubMed:23667253, ECO:0000269 PubMed:27543824, ECO:0000269 PubMed:27863242, ECO:0000269 PubMed:29861391, ECO:0000269 PubMed:32006463}.</p>
Molecular Weight:	43.4 kDa
UniProt:	<a href="#">Q9BRX2</a>

## Application Details

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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:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational

## Application Details

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modifications.

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Restrictions: For Research Use only

## Handling

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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.

Expiry Date: Unlimited (if stored properly)

## Images

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**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process