

### Datasheet for ABIN3087504

## POLR3H Protein (AA 1-204) (Strep Tag)



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Quantity:	1 mg
Target:	POLR3H
Protein Characteristics:	AA 1-204
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This POLR3H protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

#### **Product Details**

## Sequence:

MFVLVEMVDT VRIPPWQFER KLNDSIAEEL NKKLANKVVY NVGLCICLFD ITKLEDAYVF
PGDGASHTKV HFRCVVFHPF LDEILIGKIK GCSPEGVHVS LGFFDDILIP PESLQQPAKF
DEAEQVWVWE YETEEGAHDL YMDTGEEIRF RVVDESFVDT SPTGPSSADA TTSSEELPKK
EAPYTLVGSI SEPGLGLLSW WTSN

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).

Durification:

• 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.

One step Strep tog purification of proteins expressed in Almost Living Call Free Expression

(RPC22.9), FUNCTION: DNA-dependent RNA polymerase catalyzes the transcription of DNA into

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Ceil-Free Expression System (AliCE®).	
Purity:	> 80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).	
Target Details		
Target:	POLR3H	
Target: Alternative Name:	POLR3H POLR3H (POLR3H Products)	

RNA using the four ribonucleoside triphosphates as substrates (PubMed:20413673, PubMed:34675218, PubMed:33558764). Specific peripheric component of RNA polymerase III (Pol III) which synthesizes small non-coding RNAs including 5S rRNA, snRNAs, tRNAs and miRNAs from at least 500 distinct genomic loci. With CRCP/RPC9 forms a mobile stalk that protrudes from Pol III core and functions primarily in transcription initiation (PubMed:34675218, PubMed:33558764) (By similarity). Pol III plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as nuclear and cytosolic DNA sensor involved in innate immune response. Can sense non-self dsDNA that serves as template for transcription into dsRNA. The non-self RNA polymerase III transcripts, such as Epstein-Barr virus-encoded RNAs (EBERs) induce type I interferon and NF-kappa-B through the RIG-I pathway (PubMed:19609254, PubMed:19631370). {ECO:0000250, ECO:0000250|UniProtKB:094285, ECO:0000269|PubMed:19609254, ECO:0000269|PubMed:19631370, ECO:0000269|PubMed:20413673, ECO:0000269|PubMed:33558764, ECO:0000269|PubMed:34675218}.

Molecular Weight:

22.9 kDa

UniProt:

09Y535

## **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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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!

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.
Expiry Date:	Unlimited (if stored properly)