

Datasheet for ABIN3117447

## RNF145 Protein (AA 1-663) (Strep Tag)



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### 1 Image

#### Overview

Quantity:	1 mg
Target:	RNF145
Protein Characteristics:	AA 1-663
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This RNF145 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

#### Product Details

Sequence: MAAKEKLEAV LNVALRVPSI MLLDVLYRWD VSSFFQIQR SSSLNNPLFQ YKYLALNMHY  
VGYILSVLL TLPRQHLVQL YLYFLTALLL YAGHQISRDI VRSELEFAYE GPMYLEPLSM  
NRFTTALIGQ LVVCTLCSCV MKTKQIWLFS AHMLPLLARL CLVPLETIVI INKFAMIFTG  
LEVLYFLGSN LLVPYNLAKS AYRELVQVVE VYGLLALGMS LWNQLVVPVL FMVFWLVLFA  
LQIYSYFSTR DQPASRERLL FLFLTSIAEC CSTPYSLLGL VFTVSFVALG VLTLCCKFYLO  
GYRAFMDNPA MNRGMTEGVT LLILAVQTGL IELQVVHRAF LLSILFIV ASILQSMLEI  
ADPIVLALGA SRDKSLWKHF RAVSLCLFLL VFPAYMAYMI CQFFHMDFWL LIISSSILT  
SLQVLGTLFI YVLFMVEEFR KEPVENMDDV IYVNGTYRL LEFLVALCVV AYGVSSETIFG  
EWTVMGSMII FIHSYYNVWL RAQLGWKSFL LRRDAVNKIK SLPIATKEQL EKHNIDICAIC  
YQDMKSAVIT PCSHFFHAGC LKKWLYVQET CPLCHCHLKN SSQLPGLGTE PVLQPHAGAE  
QNVMFQEGTE PPGQEHTPGT RIQEGSRDNN EYIARRPDNQ EGAFDPKEYP HSAKDEAHPV ESA

**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.**

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### Characteristics:

#### Key Benefits:

- 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 Expasy's ProtParam tool to determine the absorption coefficient of each protein.

### 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
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## Product Details

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- 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.

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: RNF145

Alternative Name: RNF145 ([RNF145 Products](#))

Background: RING finger protein 145 (EC 2.3.2.27),FUNCTION: E3 ubiquitin ligase that catalyzes the direct transfer of ubiquitin from E2 ubiquitin-conjugating enzyme to a specific substrate. In response to bacterial infection, negatively regulates the phagocyte oxidative burst by controlling the turnover of the NADPH oxidase complex subunits. Promotes monoubiquitination of CYBA and 'Lys-48'-linked polyubiquitination and degradation of CYBB NADPH oxidase catalytic subunits, both essential for the generation of antimicrobial reactive oxygen species. Involved in the maintenance of cholesterol homeostasis. In response to high sterol concentrations ubiquitinates HMGCR, a rate-limiting enzyme in cholesterol biosynthesis, and targets it for degradation. The interaction with INSIG1 is required for this function. In addition, triggers ubiquitination of SCAP, likely inhibiting its transport to the Golgi apparatus and the subsequent processing/maturation of SREBPF2, ultimately down-regulating cholesterol biosynthesis. {ECO:0000250|UniProtKB:Q5SWK7}.

Molecular Weight: 75.6 kDa

UniProt: [Q96MT1](#)

## 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 *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce

## Application Details

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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