

Datasheet for ABIN3096392

DFNB31 Protein (AA 1-907) (Strep Tag)



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1 Image

Overview

Quantity:	1 mg
Target:	DFNB31
Protein Characteristics:	AA 1-907
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This DFNB31 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MNAPLDGLSV SSSSTGSLGS AAGAGGGGGA GLRLLSANVR QLHQALTALL SEAEREQFTH
 CLNAYHARRN VFDLVRTLRV LLDSPVKRRL LPMLRLVIPR SDQLLFDQYT AEGLYLPATT
 PYRQPAWGGP DSAGPGEVRL VSLRRAKAHE GLGFSIRGGS EHGVIYVSL VEPGSLAEKE
 GLRVGDQILR VNDKSLARVT HAEAVKALKG SKKLVLVSYS AGRIPGGYVT NHIYTWVDPQ
 GRSISPPSGL PQPHGGALRQ QEGDRRSTLH LLQGGDEKKV NLVLGDGRSL GLTIRGGAEY
 GLGIYITGVD PGSEAEGSGL KVGDIQILEVN GRSFLNILHD EAVRLLKSSR HLILTVKDVG
 RLPHARTTVD ETKWIASRI RETMANSAGF LGDLTTEGIN KPGFYKGPAG SQVTLSSLGN
 QTRVLLLEEQA RHLLNEQEHA TMAYYLDEYR GGSVSVEALV MALFKLLNTH AKFSLLEVR
 GTISPQDLER FDHLVLRREI ESMKARQPPG PGAGDTYSMV SYSDTGSSTG SHGTSTTVSS
 ARNTLDLEET GEAVQGNINA LPDVSVDVDR STSQGLSSFK PLPRPPPLAQ GNDLPLGQPR
 KLGREDLQPP SSMPSCSGTV FSAPQNRSP AGTAPTPGTS SAQDLPSPI YASVSPANPS
 SKRPLDAHLA LVNQHPIGPF PRVQSPPHLK SPSAEATVAG GCLLPPSPSG HPDQTGTNQH

FVMVEVHRPD SEPDVNEVRA LPQTRTASTL SQLSDSGQTL SEDSGVDAGE AEASAPGRGR
QSVSTKSRSS KELPRNERPT DGANKPPGLL EPTSTLVRVK KSAATLGIAI EGGANTRQPL
PRIVTIQRGG SAHNCGQLKV GHVILEVNGL TLRGKEHREA ARIIAEAFKT KDRDYIDFLV TEFNVML

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 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.

Product Details

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): <ol style="list-style-type: none">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.
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

Target:	DFNB31
Alternative Name:	WHRN (DFNB31 Products)
Background:	Whirlin (Autosomal recessive deafness type 31 protein),FUNCTION: Involved in hearing and vision as member of the USH2 complex. Necessary for elongation and maintenance of inner and outer hair cell stereocilia in the organ of Corti in the inner ear. Involved in the maintenance of the hair bundle ankle region, which connects stereocilia in cochlear hair cells of the inner ear. In retina photoreceptors, required for the maintenance of periciliary membrane complex that seems to play a role in regulating intracellular protein transport. {ECO:0000250 UniProtKB:Q80VW5}.
Molecular Weight:	96.6 kDa
UniProt:	Q9P202
Pathways:	Sensory Perception of Sound

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:	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

modifications.

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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.

Expiry Date: Unlimited (if stored properly)

Images



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