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Datasheet for ABIN3131305
NFIL3 Protein (AA 1-462) (Strep Tag)

Overview

Quantity:	1 mg
Target:	NFIL3
Protein Characteristics:	AA 1-462
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFIL3 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence: MQLRKMQTIK KEPAPLDPTS SSDKMLLLNS ALAEVAEDLA SGEDLLLNEG SMGKNKSSAC
RRKREFIPDE KKDAMYWEKR RKNNEAAKRS REKRRNLNDLV LENKLIALGE ENATLKAELL
SLKLFGLIS STAYAQEIQK LSNSTAVYFQ DYQTSKAAVS SFVDEHEPAM VAGSCISVIK
HSPQSSLSDV SEVSSVEHTQ ESPAQGGCRS PENKFPVIKQ EPVELESFAR EAREERTYS
TSIQSYMGS SFSTYSHSPP LLQVHGSTSN SPRTSEADEG VVGKSSDGED EQQVPGPIH
SPVELQRVHA TVVKVPEVNP SALPHKLRK AKAMQVKVEA LDSEFEGMQK LSSPADAIK
RHFDFLEKHGT SGMAHSSLPP FSVQVTNIQD WSLKSEHWHH KELSSKTQSS FKTGVVEVKD
GGYKVSEAEN LYLKQGIANL SAEVSLKRF IATQPISASD SR

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.

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

Purity: $\geq 80\%$ as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Endotoxin Level: Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target: NFIL3

Alternative Name: Nfil3 ([NFIL3 Products](#))

Background: Nuclear factor interleukin-3-regulated protein (E4 promoter-binding protein 4) (Embryo implantation-related NFIL3/E4BP4-like transcription factor),FUNCTION: Acts as a transcriptional regulator that recognizes and binds to the sequence 5'-[GA]TTA[CT]GTAA[CT]-3', a sequence present in many cellular and viral promoters. Represses transcription from promoters with activating transcription factor (ATF) sites (By similarity). Represses promoter activity in osteoblasts. Represses transcriptional activity of PER1. Represses transcriptional activity of PER2 via the B-site on the promoter. Activates transcription from the interleukin-3 promoter in T-cells (By similarity). Competes for the same consensus-binding site with PAR DNA-binding factors (DBP, HLF and TEF). Component of the circadian clock that acts as a negative regulator for the circadian expression of PER2 oscillation in the cell-autonomous core clock. Protects pro-B cells from programmed cell death. Represses the transcription of CYP2A5 (PubMed:30555544). Positively regulates the expression and activity of CES2 by antagonizing the repressive action of NR1D1 on CES2 (PubMed:29653076). Required for the development of natural killer cell precursors (PubMed:32190943). {ECO:0000250|UniProtKB:Q16649, ECO:0000269|PubMed:11316793, ECO:0000269|PubMed:15087429, ECO:0000269|PubMed:17182630, ECO:0000269|PubMed:29653076, ECO:0000269|PubMed:30555544, ECO:0000269|PubMed:32190943, ECO:0000269|PubMed:9122243}.

Molecular Weight: 50.9 kDa

UniProt: [O08750](#)

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 *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

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)