

Datasheet for ABIN3136939

NONO Protein (AA 1-473) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	NONO
Protein Characteristics:	AA 1-473
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NONO protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MQSNKAFNLE KQNHTPRKHH QHHHQHHQQ QQQQQQQPP PPIPANGQQA SSQNEGLTID LKNFRKPGEK TFTQRSRLFV GNLPDITEE EMRKLFEKYG KAGEVFIHKD KGFGFIRLET RTLAEIAKVE LDNMPLRGKQ LRVRFACHSA SLTVRNLPQY VSNELLEAF SVFGQVERAV VIVDDRGRPS GKGIVEFSGK PAARKALDRC SEGSLTTF PRPVTVEPMD QLDDEEGLPE KLVIKNQQFH KEREQPPRFA QPGSFEYEYA MRWKALIE ME KQQDQVDRN IKEAREKLEM EMEAARHEHQ VMLMRQDLMR RQEELRRMEE LHNQEVQKRK QLELRQEEER RRREEEMRRQ QEEMMRRQGE GFKGTFPDAR EQEIRMGQMA MGGAMGINNR GAMPPAPVPP GTPAPPGPAT MMPDGTGLT PPTTERFGQA ATMEGIGAIG GTPPAFNRPA PGAEFAPNKR RRY</p> <p>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.</p>

Product Details

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).
- 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 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 against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade:

custom-made

Target Details

Target:	NONO
Alternative Name:	Nono (NONO Products)
Background:	<p>Non-POU domain-containing octamer-binding protein (NonO protein),FUNCTION: DNA- and RNA binding protein, involved in several nuclear processes. Binds the conventional octamer sequence in double-stranded DNA (PubMed:8355702). Also binds single-stranded DNA and RNA at a site independent of the duplex site (By similarity). Involved in pre-mRNA splicing, probably as a heterodimer with SFPQ (By similarity). Interacts with U5 snRNA, probably by binding to a purine-rich sequence located on the 3' side of U5 snRNA stem 1b (By similarity). Together with PSPC1, required for the formation of nuclear paraspeckles (By similarity). The SFPQ-NONO heteromer associated with MATR3 may play a role in nuclear retention of defective RNAs (By similarity). The SFPQ-NONO heteromer may be involved in DNA unwinding by modulating the function of topoisomerase I/TOP1 (By similarity). The SFPQ-NONO heteromer may be involved in DNA non-homologous end joining (NHEJ) required for double-strand break repair and V(D)J recombination and may stabilize paired DNA ends (By similarity). In vitro, the complex strongly stimulates DNA end joining, binds directly to the DNA substrates and cooperates with the Ku70/G22P1-Ku80/XRCC5 (Ku) dimer to establish a functional preligation complex (By similarity). NONO is involved in transcriptional regulation (By similarity). The SFPQ-NONO-NR5A1 complex binds to the CYP17 promoter and regulates basal and cAMP-dependent transcriptional activity (By similarity). NONO binds to an enhancer element in long terminal repeats of endogenous intracisternal A particles (IAPs) and activates transcription (PubMed:9001221). Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-BMAL1 heterodimer (PubMed:22966205). Important for the functional organization of GABAergic synapses (PubMed:26571461). Plays a specific and important role in the regulation of synaptic RNAs and GPHN/gephyrin scaffold structure, through the regulation of GABRA2 transcript (PubMed:26571461). Plays a key role during neuronal differentiation by recruiting TET1 to genomic loci and thereby regulating 5-hydroxymethylcytosine levels (PubMed:32286661). Plays a role in the regulation of DNA virus-mediated innate immune response by assembling into the HDP-RNP complex, a complex that serves as a platform for IRF3 phosphorylation and subsequent innate immune response activation through the cGAS-STING pathway (By similarity). {ECO:0000250 UniProtKB:Q15233, ECO:0000269 PubMed:22966205, ECO:0000269 PubMed:26571461, ECO:0000269 PubMed:32286661, ECO:0000269 PubMed:8355702, ECO:0000269 PubMed:9001221}.</p>
Molecular Weight:	54.5 kDa

Target Details

UniProt: [Q99K48](#)

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 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!

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months