Datasheet for ABIN7564883

NONO Protein (AA 1-473) (His tag)

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Overview

Quantity:	1 mg
Target:	NONO
Protein Characteristics:	AA 1-473
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NONO protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Nono Protein expressed in mammalien cells.
Sequence:	MQSNKAFNLE KQNHTPRKHH QHHHQQHHQQ QQQQQQQQPP PPIPANGQQA SSQNEGLTID LKNFRKPGEK TFTQRSRLFV GNLPPDITEE EMRKLFEKYG KAGEVFIHKD KGFGFIRLET RTLAEIAKVE LDNMPLRGKQ LRVRFACHSA SLTVRNLPQY VSNELLEEAF SVFGQVERAV VIVDDRGRPS GKGIVEFSGK PAARKALDRC SEGSFLLTTF PRPVTVEPMD QLDDEEGLPE KLVIKNQQFH KEREQPPRFA QPGSFEYEYA MRWKALIEME KQQQDQVDRN IKEAREKLEM EMEAARHEHQ VMLMRQDLMR RQEELRRMEE LHNQEVQKRK QLELRQEEER RRREEEMRRQ QEEMMRRQQE GFKGTFPDAR EQEIRMGQMA MGGAMGINNR GAMPPAPVPP GTPAPPGPAT MMPDGTLGLT PPTTERFGQA ATMEGIGAIG GTPPAFNRPA PGAEFAPNKR RRY **Sequence without tag. The proposed Purification-Tag is based on experiences 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.**

Product Details

Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	NONO
Alternative Name:	Nono (NONO Products)
Background:	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

Target Details

	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}.
Molecular Weight:	54.5 kDa
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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months