

Product datasheet for TP507550

Nono (NM_023144) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse non-POU-domain-containing, octamer binding protein (Nono), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA >MR207550 protein sequence

Clone or AA **Red**=Cloning site **Green**=Tags(s)

Sequence:

MQSNKAFNLEKQNHTPRKHHQH HHQHHQHQQQQQQQPPPIIPANGQQASSQNEGLTIDLK NFRKPGEK
TFTQRSRLFVGNLPPDITEEEMRKLFEKYGKAGEVFIHKDKGFGFIRLETRTLAEIAKVELDNMPLRGKQ
LRVRFACHSASLTVRNLPQYVSNELLEAFSVFGQVERAVVIVDDRGRPSGKGIVFSGKPAARKALDRC
SEGSFLLTTFPRPVTVEPMDQLDDEEGLPEKLVIKNQFHKEREQPPRFAQPGSFYEYAMRWKALIEME
KQQQDQVDRNIKEAREKLEMEMEAARHEHQVMLMRQDLMRQEELRRMEELHNQEVQKRKQLELRQEEER
RRREEMRRQQEEMMRQQEGFKGTFPDAREQEIRMGQMAMGGAMGINNRGAMPPAPVPPGTPAPPGPAT
MMPDGTGLTPTTTERFGQAATMEGIGAIGGTPPAFNRPAAGAEFAPNKRRRY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK

Predicted MW: 54.5 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: [NP_075633](#)

Locus ID: 53610



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UniProt ID: [Q99K48](#), [Q4FK11](#)

RefSeq Size: 2468

Cytogenetics: X D

RefSeq ORF: 1422

Synonyms: AA407051; AV149256; nonA; NRB54; P54NRB

Summary: DNA- and RNA binding protein, involved in several nuclear processes. Binds the conventional octamer sequence in double-stranded DNA. Also binds single-stranded DNA and RNA at a site independent of the duplex site. Involved in pre-mRNA splicing, probably as a heterodimer with SFPQ. Interacts with U5 snRNA, probably by binding to a purine-rich sequence located on the 3' side of U5 snRNA stem 1b. Together with PSPC1, required for the formation of nuclear paraspeckles. The SFPQ-NONO heteromer associated with MATR3 may play a role in nuclear retention of defective RNAs. The SFPQ-NONO heteromer may be involved in DNA unwinding by modulating the function of topoisomerase I/TOP1. 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. 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. NONO is involved in transcriptional regulation. The SFPQ-NONO-NR5A1 complex binds to the CYP17 promoter and regulates basal and cAMP-dependent transcriptional activity. NONO binds to an enhancer element in long terminal repeats of endogenous intracisternal A particles (IAPs) and activates transcription. Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer. Important for the functional organization of GABAergic synapses. 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 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.[UniProtKB/Swiss-Prot Function]