



NONO (PT1974R) Rabbit mAb

Catalog No	YP-rAb-18531
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB、IHC、IF、ELISA
Gene Name	NONO NRB54
Protein Name	Non-POU domain-containing octamer-binding protein (NonO protein) (54 kDa nuclear RNA- and DNA-binding protein) (55 kDa nuclear protein) (DNA-binding p52/p100 complex, 52 kDa subunit) (NMT55) (p54 (nrb)) (p54nrb)
Immunogen	The specific immunogen used to produce this antibody is proprietary information.
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Purification	Recombinant Antibody expressed in animal component-free (ACF) media, purified via Protein A affinity chromatography.
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000 Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0 (Cat#YS0004)
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	63kD
Calculated Molecular Weight	54kD
Cell Pathway	Nucleus . Nucleus , nucleolus. Nucleus speckle . Chromosome . Detected in punctate subnuclear structures often located adjacent to splicing speckles , called paraspeckles .
Tissue Specificity	Heart , brain , placenta , lung , liver , skeletal muscle , kidney and pancreas. Also found in a number of breast tumor cell lines.
Function	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 (By similarity) . Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer (By similarity) . Important for the functional organization of GABAergic synapses (By similarity) . Plays a specific and important role in the regulation of synaptic RNAs and GPHN/gephyrin scaffold structure , through the regulation of GABRA2 transcript (By similarity) . Plays a key role during neuronal differentiation by recruiting TET1 to genomic loci and thereby regulating 5-hydroxymethylcytosine levels (By similarity) . 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 . Promotes activation of the cGAS-STING pathway in response to HIV-2 infection: acts by interacting with HIV-2 Capsid protein p24 , thereby promoting detection of viral DNA by CGAS , leading to CGAS-mediated immune activation . In contrast , the weak interaction with HIV-1 Capsid protein p24 does not allow activation of the cGAS-STING pathway .

Background

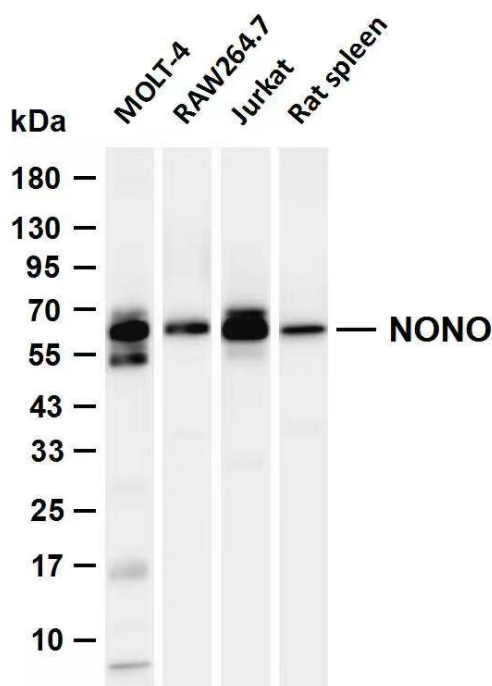
matters needing attention

Avoid repeated freezing and thawing!

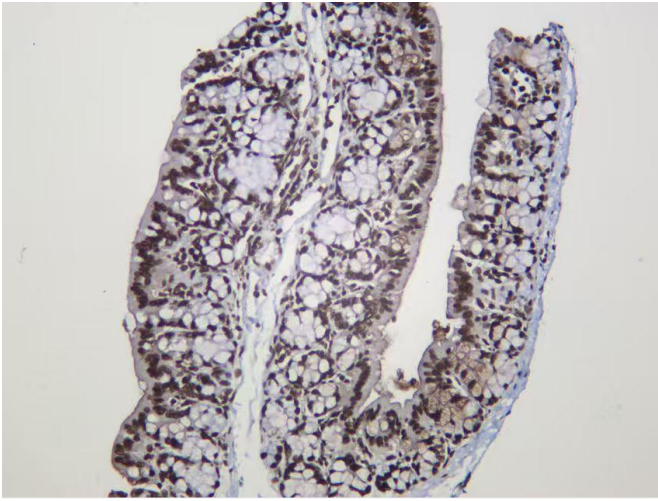
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

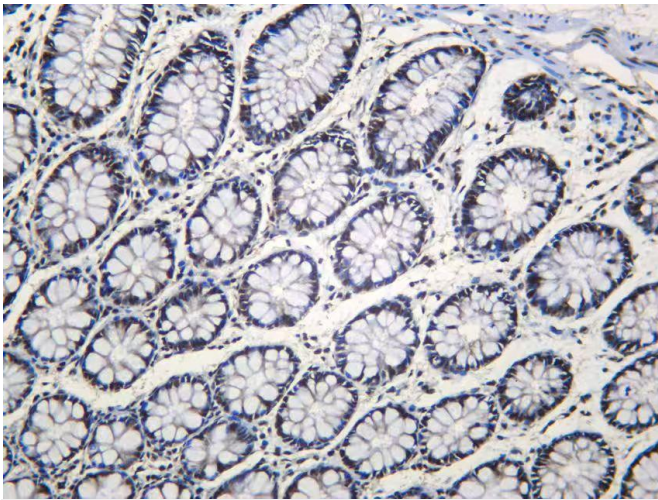
Products Images



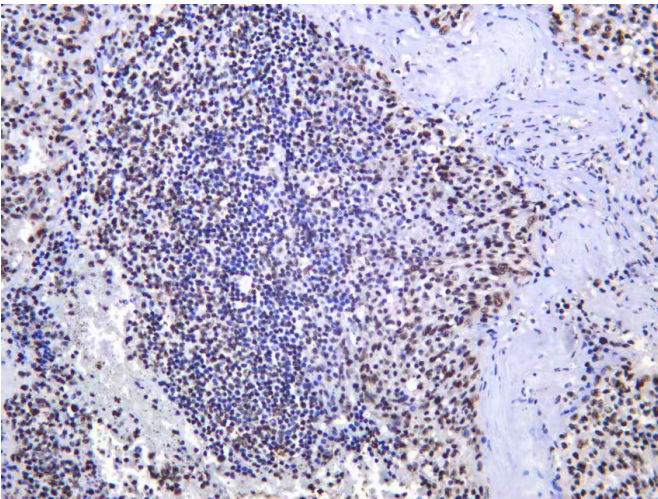
Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-NONO (PT1974R) antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: MOLT-4 Lane 2: RAW264.7 Lane 3: Jurkat Lane 4: Rat spleen Predicted band size: 54kDa Observed band size: 63kDa



Mouse colon was stained with anti-NONO (PT1974R)
Rabbit antibody



Human colon was stained with anti-NONO (PT1974R)
Rabbit antibody



Human tonsil was stained with anti-NONO (PT1974R)
Rabbit antibody