3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-NONO (C-terminal)
produced in rabbit, affinity isolated antibody

Product Number **N8664**

Product Description

Anti-NONO (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human NONO (GeneID: 4841) conjugated to KLH. The corresponding sequence differs by one amino acid in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-NONO (C-terminal) recognizes human and mouse NONO. The antibody may be used in several immunochemical techniques including immunoblotting (~55 kDa), immunoprecipitation, and immuno-fluorescence. Detection of the NONO band by immunoblotting is specifically inhibited with the immunizing peptide.

NONO (also known as p54nrb) is a nuclear protein implicated in numerous processes including transcription, pre-mRNA processing, nuclear retention of edited RNA and DNA relaxation.[1] Due to NONO's high similarity to the C-terminus of the human splicing factor PSF, and the fact that it was originally purified as a heterodimer with PSF, NONO was suspected to be involved in pre-mRNA splicing. Later it was found that NONO and PSF mediate different functions depending on their intracellular location.[1]

NONO is ubiquitously expressed and comprises of two tandem RNP-type RNA- recognition motifs and a putative helix-turn-helix domain followed by a highly charged region.[2] It is enriched in paraspeckles, a nucleoplasmic compartment, and relocalizes to cap structures at the nucleolar periphery when transcription is inhibited.[3] It was shown that NONO is phosphorylated on multiple sites during mitosis and is a target of the peptidylprolyl isomerase, Pin1.[4]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 1-2 μg/mL is recommended using NIH-3T3 cell lysates.

Immunoprecipitation: a working antibody amount of 2.5-5 μg is recommended using HeLa cell lysates.

Immunofluorescence: a working antibody concentration of 2-5 μg/mL is recommended using paraformaldehyde fixed HeLa cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Shav-Tal, Y., and Zipori, D., *FEBS Lett.*, **531**, 109-114 (2002).
2. Dong, B. et al., *Nucl. Acids Res.,* **21**, 4085-4092 (1993).
3. Fox, A. et al., *Curr. Biol.,* **12**, 13-25 (2002).
4. Proteau, A. et al., *J. Mol. Biol.,* **346**,1163-1172 (2005).

VS,SG,TD,KAA,PHC,MAM 04/19-1