

# NMD3 (L-21): sc-130828



The Power to Question

## BACKGROUND

Ribosomal subunits are synthesized in the nucleus and mature 40S and 60S subunits are exported stoichiometrically into the cytoplasm. Together these subunits are composed of four RNA species and approximately 80 structurally distinct proteins. Ribosomal proteins have the ability to pass through the nuclear envelope in the native state, making them the largest of the structures accommodated by the nuclear pore complexes. Nuclear export of the 60S ribosomal subunit depends on the adapter protein NMD3, which contains a CRM-1-dependent leucine-rich nuclear export signal (NES) and a complex, dispersed nuclear localization signal (NLS). The gene encoding NMD3 is located on human chromosome 3, which encodes over 1,100 genes and contains a variety of human cancer related loci.

## REFERENCES

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4. Thomas, F. and Kutay, U. 2003. Biogenesis and nuclear export of ribosomal subunits in higher eukaryotes depend on the CRM1 export pathway. *J. Cell. Sci.* 116 (Pt 12): 2409-2419.
5. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
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## CHROMOSOMAL LOCATION

Genetic locus: NMD3 (human) mapping to 3q26.1; Nmd3 (mouse) mapping to 3 E1.

## SOURCE

NMD3 (L-21) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of NMD3 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

NMD3 (L-21) is recommended for detection of NMD3 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NMD3 siRNA (h): sc-78248, NMD3 siRNA (m): sc-150008, NMD3 shRNA Plasmid (h): sc-78248-SH, NMD3 shRNA Plasmid (m): sc-150008-SH, NMD3 shRNA (h) Lentiviral Particles: sc-78248-V and NMD3 shRNA (m) Lentiviral Particles: sc-150008-V.

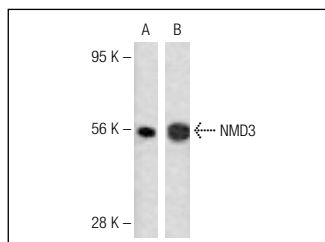
Molecular Weight of NMD3: 58 kDa.

Positive Controls: mouse heart extract: sc-2254 or T-47D cell lysate: sc-2293.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



NMD3 (L-21): sc-130828. Western blot analysis of NMD3 expression in mouse heart tissue extract (A) and T-47D whole cell lysate (B).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **NMD3 (A-5): sc-515426**, our highly recommended monoclonal alternative to NMD3 (L-21).