

Product Information

Anti-NMD3

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200451**

Product Description

Anti-NMD3 is produced in rabbit using as immunogen a peptide corresponding to an internal region of human NMD3 (GeneID: **51068**), conjugated to KLH. The corresponding sequence is identical in mouse, rat, monkey, bovine and dog. The antibody is affinity purified using the immunizing peptide immobilized on agarose.

Anti-NMD3 recognizes human and mouse NMD3. The antibody may be used in various immunochemical techniques including immunoblotting (~58 kDa) and immunofluorescence. Detection of the NMD3 band by immunoblotting is specifically inhibited by the immunizing peptide.

NMD3 is a highly conserved nucleocytoplasmic shuttling protein, essential for nuclear export of 60S ribosomal subunits. Ribosomes are composed of 60S and 40S subunits that are assembled in the nucleolus and exported to the cytoplasm through nuclear pore complexes in the nuclear envelope. NMD3 is an adaptor for 60S subunit export via the export receptor CRM1 (XPO1). Human NMD3 contains a CRM1-dependent leucine-rich nuclear export signal (NES) and a nuclear localization signal (NLS) in its C-terminal domain, required for nucleocytoplasmic shuttling. The N-terminal domain of NMD3 contains two zinc-binding centers and comprises the ribosome-binding domain.¹⁻⁵

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

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2.5-5.0 µg/mL is recommended using whole extracts of HEK-293T cells over-expressing mouse NMD3.

Immunofluorescence: a working concentration of 2.5-5 µg/mL is recommended using human HeLa cells.

Notes:

- In order to obtain best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.
- It is recommended to dilute the antibody in a dilution buffer containing 0.5-5% non-fat dry milk (NFDM).

References

1. Trotta, C.R., et al., *EMBO J.*, **22**, 2841-2851 (2003).
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3. Lo, K.Y., et al., *Mol. Cell*, **39**, 196-208 (2010).
4. Belk, J.P., et al., *RNA*, **5**, 1055-1070 (1999).
5. Ho, J.H., et al., *J. Cell Biol.*, **151**, 1057-1066 (2000).

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