

NURIM (K-13): sc-133261

BACKGROUND

NURIM, also known as NRM or NRM29, is a 262 amino acid multi-pass membrane protein that localizes to the inner membrane of the nucleus. Existing as multiple alternatively spliced isoforms, NURIM is thought to possess enzymatic functions that may play a role in nuclear envelope (NE) dynamics. The gene encoding NURIM maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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2. Holmer, L., et al. 2001. Inner nuclear membrane proteins: functions and targeting. *Cell. Mol. Life Sci.* 58: 1741-1747.
3. Otsuki, T., et al. 2005. Signal sequence and keyword trap in silico for selection of full-length human cDNAs encoding secretion or membrane proteins from oligo-capped cDNA libraries. *DNA Res.* 12: 117-126.
4. Hofemeister, H., et al. 2005. Analysis of the localization and topology of NURIM, a polytopic protein tightly associated with the inner nuclear membrane. *J. Biol. Chem.* 280: 2512-2521.
5. Shiina, T., et al. 2006. Rapid evolution of major histocompatibility complex class I genes in primates generates new disease alleles in humans via hitchhiking diversity. *Genetics* 173: 1555-1570.
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CHROMOSOMAL LOCATION

Genetic locus: NRM (human) mapping to 6p21.33; Nrm (mouse) mapping to 17 B1.

SOURCE

NURIM (K-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NURIM of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-133261 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

NURIM (K-13) is recommended for detection of NURIM isoforms 1 and 2 of mouse, rat 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with NURIM isoforms 3, 4 or 5.

Suitable for use as control antibody for NURIM siRNA (h): sc-95631, NURIM siRNA (m): sc-150128, NURIM shRNA Plasmid (h): sc-95631-SH, NURIM shRNA Plasmid (m): sc-150128-SH, NURIM shRNA (h) Lentiviral Particles: sc-95631-V and NURIM shRNA (m) Lentiviral Particles: sc-150128-V.

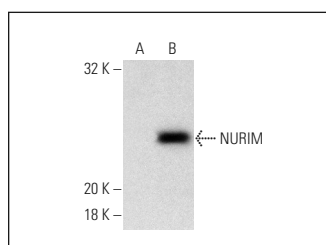
Molecular Weight of NURIM: 30 kDa.

Positive Controls: NURIM (m2): 293T Lysate: sc-122182.

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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



NURIM (K-13): sc-133261. Western blot analysis of NURIM expression in non-transfected: sc-117752 (A) and mouse NURIM transfected: sc-122182 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.