

NURIM (m2): 293T Lysate: sc-122182

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

1. Rolls, M.M., et al. 1999. A visual screen of a GFP-fusion library identifies a new type of nuclear envelope membrane protein. *J. Cell Biol.* 146: 29-44.
2. Holmer, L. and Worman, H.J. 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. and O'Hare, P. 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.
6. Braunagel, S.C., et al. 2007. Early sorting of inner nuclear membrane proteins is conserved. *Proc. Natl. Acad. Sci. USA* 104: 9307-9312.

CHROMOSOMAL LOCATION

Genetic locus: Nrm (mouse) mapping to 17 B1.

PRODUCT

NURIM (m2): 293T Lysate represents a lysate of mouse NURIM transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

RESEARCH USE

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

APPLICATIONS

NURIM (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NURIM antibodies. Recommended use: 10-20 µl per lane.

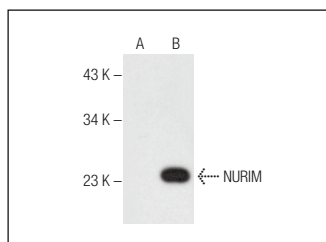
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NURIM (B-1): sc-390174 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse NURIM expression in NURIM transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



NURIM (B-1): sc-390174. Western blot analysis of NURIM expression in non-transfected: sc-117752 (A) and mouse NURIM transfected: sc-122182 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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