

nucleobindin (E-17): sc-69303

BACKGROUND

Nucleobindin, also designated NUC or CALNUC, is a secreted protein that promotes production of DNA-specific antibodies in lupus-prone MRL/LPR mice. Nucleobindin contains a signal peptide, two EF-hand motifs, acidic and basic regions and a leucine-zipper motif. Nucleobindin has two calcium-binding domains and is the major Golgi Ca²⁺ binding protein. The leucine zipper structure and the basic amino acid-rich region are responsible for DNA binding. Nucleobindin preferentially associates with membranes of polarized cells. Nucleobindin is found in both the cytosol and the membrane and is localized to *cis*-Golgi cisternae and the *cis*-Golgi network (CGN). Nucleobindin is involved in autoimmunity, apoptosis and calcium homeostasis in the bone matrix.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NUCB1 (human) mapping to 19q13.33; Nucb1 (mouse) mapping to 7 B3.

RESEARCH USE

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

SOURCE

nucleobindin (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of nucleobindin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-69303 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

nucleobindin (E-17) is recommended for detection of nucleobindin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

nucleobindin (E-17) is also recommended for detection of nucleobindin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for nucleobindin siRNA (h): sc-40778, nucleobindin siRNA (m): sc-40779, nucleobindin shRNA Plasmid (h): sc-40778-SH, nucleobindin shRNA Plasmid (m): sc-40779-SH, nucleobindin shRNA (h) Lentiviral Particles: sc-40778-V and nucleobindin shRNA (m) Lentiviral Particles: sc-40779-V.

Molecular Weight of nucleobindin: 55 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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


 MONOS
 Satisfaction
 Guaranteed

Try **nucleobindin (D-8): sc-515246** or **nucleobindin (R-Y2): sc-100793**, our highly recommended monoclonal alternatives to nucleobindin (E-17).