

nucleobindin 2 (H-74): sc-135047

BACKGROUND

Nucleobindin 2, also designated NUCB2 or NEFA, is a 420 amino acid protein that is predominantly expressed in spleen, testis and stomach. It localizes to the Golgi, the cisternae of the endoplasmic reticulum (ER), and the nuclear envelope of neurons in the brain. nucleobindin 2 contains leucine-zipper and EF-hand motifs, two helix-loop-helix regions, and both a basic and an acidic amino acid region. The leucine zipper structure and the basic amino acid-rich region are responsible for DNA binding. It is a highly charged protein that binds Ca^{2+} via its EF-hand domains. Nucleobindin 2 is also expressed in the hypothalamic nuclei in rats, which may indicate a role in appetite control. Conversion of nucleobindin 2 to nesfatin-1 in the brain decreases food intake in rats. Nesfatin-1 is identified as a satiety molecule that is involved in melancortin signaling in the hypothalamus.

CHROMOSOMAL LOCATION

Genetic locus: NUCB2 (human) mapping to 11p15.1; Nucb2 (mouse) mapping to 7 F1.

SOURCE

nucleobindin 2 (H-74) is a rabbit polyclonal antibody raised against amino acids 347-420 mapping at the C-terminus of nucleobindin 2 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.

STORAGE

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

APPLICATIONS

nucleobindin 2 (H-74) is recommended for detection of nucleobindin 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

nucleobindin 2 (H-74) is also recommended for detection of nucleobindin 2 in additional species, including equine and canine.

Suitable for use as control antibody for nucleobindin 2 siRNA (h): sc-62705, nucleobindin 2 siRNA (m): sc-62706, nucleobindin 2 shRNA Plasmid (h): sc-62705-SH, nucleobindin 2 shRNA Plasmid (m): sc-62706-SH, nucleobindin 2 shRNA (h) Lentiviral Particles: sc-62705-V and nucleobindin 2 shRNA (m) Lentiviral Particles: sc-62706-V.

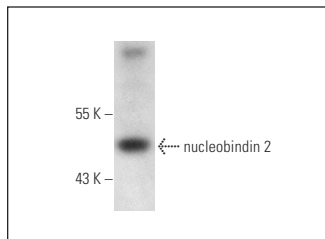
Molecular Weight of nucleobindin 2: 50 kDa.

Positive Controls: human liver extract: sc-363766, mouse heart extract: sc-2254 or Hep G2 cell lysate: sc-2227.

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



nucleobindin 2 (H-74): sc-135047. Western blot analysis of nucleobindin 2 expression in human liver tissue extract.

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.


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Try **nucleobindin 2 (D-10): sc-376947**, our highly recommended monoclonal alternative to nucleobindin 2 (H-74).