

Nucleobindin-2 Antibody

Catalog # ASC11631

Specification

Nucleobindin-2 Antibody - Product Information

Application WB, IHC, IF Primary Accession P80303

Other Accession
Reactivity
NP_005004, 4826870
Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG

Calculated MW Predicted: 46 kDa

Observed: 54 kDa KDa

Application Notes

Nucleobindin-2 Antibody can be used for

detection of Nucleobindin-2 by Western

blot starting at 0.5 µg/mL.

Nucleobindin-2 Antibody - Additional Information

Gene ID 4925

Target/Specificity

NUCB2; Nucleobindin-2 antibody is predicted to not cross-react with NUCB1.

Reconstitution & Storage

Nucleobindin-2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

Nucleobindin-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Nucleobindin-2 Antibody - Protein Information

Name NUCB2 (HGNC:8044)

Synonyms NEFA

Function

Calcium-binding protein which may have a role in calcium homeostasis (By similarity). Acts as a non-receptor guanine nucleotide exchange factor which binds to and activates guanine nucleotide-binding protein (G-protein) alpha subunit GNAI3 (By similarity).

Cellular Location

Golgi apparatus. Membrane; Peripheral membrane protein. Cytoplasm Secreted. Endoplasmic reticulum. Nucleus envelope. Note=Golgi retention is mediated by its N-terminal region



Tissue Location

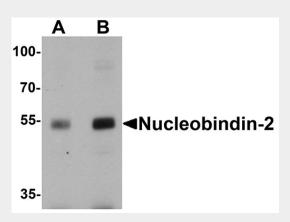
Predominantly expressed in spleen, testis and normal stomach.

Nucleobindin-2 Antibody - Protocols

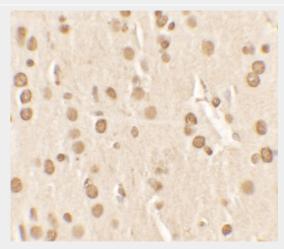
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Nucleobindin-2 Antibody - Images

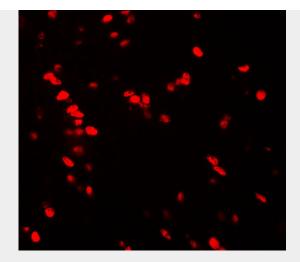


Western blot analysis of Nucleobindin-2 in rat brain tissue lysate with Nucleobindin-2 antibody at (A) 0.5 and (B) 1 μ g/mL.



Immunohistochemistry of Nucleobindin-2 in rat brain tissue with Nucleobindin-2 antibody at $2.5 \, \mu g/ml$.





Immunofluorescence of Nucleobindin-2 in rat brain tissue with Nucleobindin-2 antibody at 20 μ g/ml.

Nucleobindin-2 Antibody - Background

Nucleobindin-2 Antibody: NUCB2 was initially identified as calcium-binding protein EF hand motif-containing protein that could bind with Necdin, a growth suppressor expressed primarily in postmitotic neurons. NUC2 is a secreted protein that is cleaved into three major peptide products, Nesfatin-1, Nesfatin-2, and Nesfatin-3, of which Nesfatin-1 has been found to cause the suppression of food intake in a leptin-independent manner. Other studies have suggested that NUCB2/Nesfatin-1 may also play roles in energy homeostasis and closely related neuroendocrine functions.

Nucleobindin-2 Antibody - References

Taniguchi N, Taniura H, Niinobe M, et al. The postmitotic growth suppressor necdin interacts with a calcium-binding protein (NEFA) in neuronal cytoplasm. J. Biol. Chem. 2000; 275:31674-85. Oh IS, Shimizu H, Satoh T, et al. Identification of nesfatin-1 as a satiety molecule in the hypothalamus. Nature 2006; 443:709-12.

Garcia-Galiano D, Navarro VM, Gaytan F, et al. Expanding roles of NUCB2/nesfatin-1 in neuroendocrine regulation. J. Mol. Endocrin. 2010; 45:281-90.