

Nucleobindin-2 Antibody

Catalog # ASC11631

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P80303
Other Accession	NP_005004 , 4826870
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	50223
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Nucleobindin-2 Antibody can be used for detection of Nucleobindin-2 by Western blot starting at 0.5 µg/mL.

Additional Information

Gene ID	4925
Other Names	Nucleobindin-2, DNA-binding protein NEFA, Gastric cancer antigen Zg4, Prepronesfatin, Nesfatin-1, NUCB2, NEFA
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.

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.

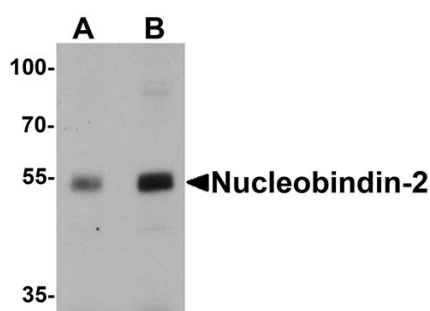
Background

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.

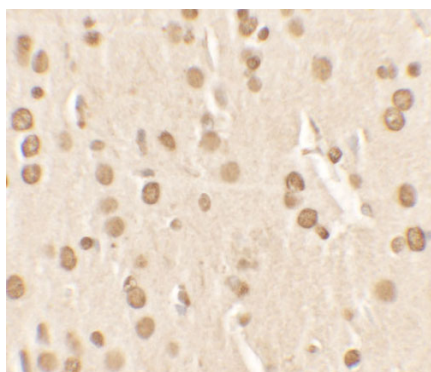
References

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.

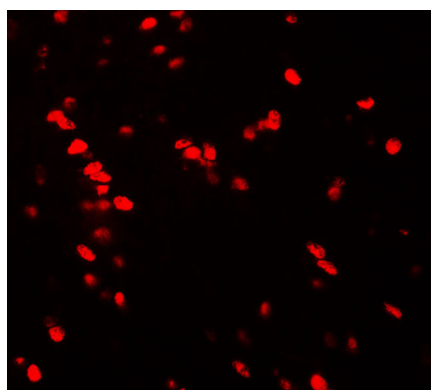
Images



Western blot analysis of Nucleobindin-2 in rat brain tissue lysate with Nucleobindin-2 antibody at (A) 0.5 and (B) 1 $\mu\text{g/mL}$.



Immunohistochemistry of Nucleobindin-2 in rat brain tissue with Nucleobindin-2 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of Nucleobindin-2 in rat brain tissue with Nucleobindin-2 antibody at 20 $\mu\text{g/mL}$.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.