

NIPSNAP Antibody

NIPSNAP (CT): Non-neuronal SNAP25-like protein, NIPSNAP1

CATALOG NO.: 4535

BACKGROUND:

NIPSNAP is a member of an evolutionarily well conserved gene family and has a strong sequence similarity to the central portion of a protein encoded by *C. elegans* chromosome III between a 4-nitrophenylphosphatase (NIP) domain and non-neuronal SNAP25-like protein (1). Recent studies have indicated that NIPSNAP is involved in the regulation of the Ca²⁺-selective transient receptor potential vanilloid channel 6 (TRPV6). NIPSNAP1 associates with TRPV6 at the plasma membrane and inhibits TRPV6 currents (2). Other studies show that NIPSNAP's expression is reduced in the phenylketonuria (PKU) mouse brain, suggesting that NIPSNAP may play a role in memory (3).

SOURCE:

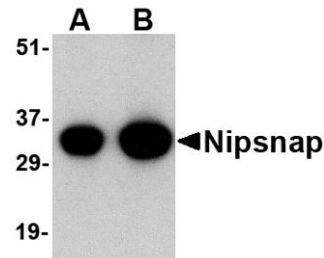
Rabbit polyclonal NIPSNAP antibody was raised against an 18 amino acid peptide from near the carboxy terminus of human NIPSNAP (Genbank accession No. NP_003625).

APPLICATION:

NIPSNAP antibody can be used for the detection of NIPSNAP by Western blot at 0.5 – 1 µg/ml. (Optimal dilution should be determined by user). Human brain tissue lysate can be used as positive control. NIPSNAP antibody is human, mouse and rat reactive. **This product is for research use only.**

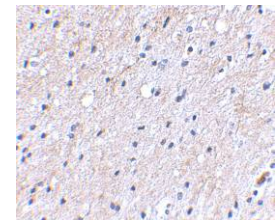
STORAGE:

NIPSNAP antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of NIPSNAP in human brain tissue lysate with NIPSNAP antibody at (A) 0.5 and (B) 1 µg/ml.

Immunohistochemical staining of human brain tissue using Nipsnap antibody at 2.5 µg/ml.



RELATED PRODUCTS:

Blocking peptide, Catalog No. **4535P**.
Human Brain Tissue Lysate, Catalog No. **1303**.
NIPSNAP Antibody (IN), Catalog No. **4537**.

REFERENCES:

1. Seroussi E, Pan H-Q, Kedra D, et al. Characterization of the human NIPSNAP1 gene from 22q12: a member of a novel gene family. *Gene* 1998; 212:13-20.
2. Schoeber JP, Topala CN, Lee KP, et al. Identification of Nipsnap1 as a novel auxiliary protein inhibiting TRPV6 activity. *Pflugers Arch.* 2008; epub.
3. Surendran S, Tying SK and Matalon R. Expression of calpastatin, minopontin, NIPSNAP1, rabaptin-5 and neuronatin in the phenylketonuria (PKU) mouse brain: possible role on cognitive defect seen in PKU. *Neurochem. Int.* 2005; 46:595-9. (08-01D)