

NIPSNAP2 Antibody

Catalog # ASC10814

Specification

NIPSNAP2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, E <u>075323</u> 075323, <u>17380133</u> Human, Mouse, Rat Rabbit Polyclonal IgG NIPSNAP2 antibody can be used for detection of NIPSNAP2 by Western blot at 0.5 and 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL.

NIPSNAP2 Antibody - Additional Information

Gene ID Target/Specificity GBAS;

2631

Reconstitution & Storage

NIPSNAP2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

NIPSNAP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NIPSNAP2 Antibody - Protein Information

Name NIPSNAP2 {ECO:0000303|PubMed:30982665, ECO:0000312|HGNC:HGNC:4179}

Function

Protein involved in mitophagy by facilitating recruitment of the autophagy machinery required for clearance of damaged mitochondria (PubMed:30982665). Accumulates on the mitochondria surface in response to mitochondrial depolarization and acts as a 'eat me' signal by recruiting proteins involved in selective autophagy, such as autophagy receptors (CALCOCO2/NDP52, NBR1, SQSTM1/p62, TAX1BP1 and WDFY3/ALFY) and ATG8 family proteins (MAP1LC3A, MAP1LC3B, MAP1LC3C, GABARAP, GABARAPL1 and GABARAPL2) (PubMed:30982665).

Cellular Location



Mitochondrion matrix

Tissue Location Widely expressed (PubMed:9615231). Most abundant in heart and skeletal muscle (PubMed:9615231)

NIPSNAP2 Antibody - Protocols

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

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

NIPSNAP2 Antibody - Images



Western blot analysis of NIPSNAP2 in human skeletal muscle tissue lysate with NIPSNAP2 antibody at (A) 0.5 and (B) $1 \mu g/mL$.



Immunohistochemistry of NIPSNAP2 in mouse skeletal muscle tissue with NIPSNAP2 antibody at 2.5 μ g/mL.

NIPSNAP2 Antibody - Background

NIPSNAP2 Antibody: The NIPSNAP proteins comprise a family of evolutionarily well-conserved proteins with 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. NIPSNAP2, a novel gene encoding a protein with tyrosine phosphorylation sites and a



transmembrane domain, is co-amplified with EGFR in approximately 40% of glioblastomas, the most common and malignant form of central nervous system tumors. It is widely expressed and most abundant in heart and skeletal muscle. NIPSNAP proteins have been suggested to be important in vesicular transport. NIPSNAP2 antibody is predicted to not cross-react with any other members of the NIPSNAP protein family.

NIPSNAP2 Antibody - References

Seroussi E, Pan HQ, Kedra D, et al. Characterization of the human NIPSNAP1 gene from 22q12: a member of a novel gene family. Gene1998; 212:13-20.

Wang X-Y, Smith DI, Liu W, et al. GBAS, a novel gene encoding a protein with tyrosine phosphorylation sites and a transmembrane domain, is co-amplified with EGFR. Genomics1998; 49:448-51.