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NIPSNAP2 Antibody

Catalog # ASC10819

Product Information

Application	WB, E, IHC-P
Primary Accession	O75323
Other Accession	O75323, 17380133
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	33743
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	NIPSNAP2 antibody can be used for detection of NIPSNAP2 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 g/mL.

Additional Information

Gene ID	2631
Other Names	Protein NipSnap homolog 2, NipSnap2, Glioblastoma-amplified sequence, GBAS, NIPSNAP2
Target/Specificity	GBAS;
Reconstitution & Storage	NIPSNAP2 antibody can be stored at 4℃ for three months and -20℃, 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.

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)

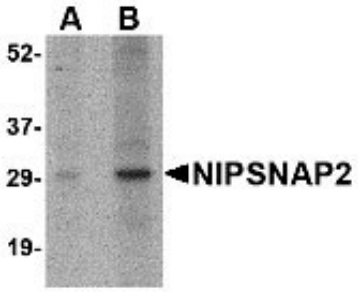
Background

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.

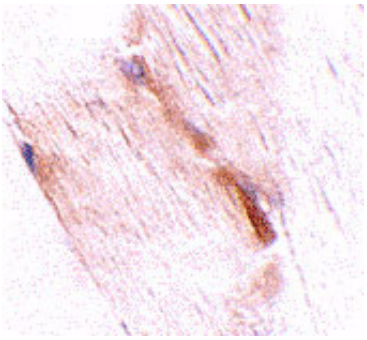
References

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.

Images



Western blot analysis of NIPSNAP2 in human skeletal muscle tissue lysate with NIPSNAP2 antibody at (A) 1 and (B) 2 µg/mL.



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