SANTA CRUZ BIOTECHNOLOGY, INC.

NIPSNAP2 (Y-12): sc-138478

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The Power to Question

BACKGROUND

NIPSNAP2, also known as GBAS (glioblastoma amplified sequence), is a 286 amino acid protein that is abundantly expressed in heart and skeletal muscle. Belonging to the NIPSNAP family, NIPSNAP2 may be involved in vesicular transport. NIPSNAP2 contains a signal peptide, a transmembrane domain and two tyrosine phosphorylation sites. NIPSNAP2 is encoded by a gene mapping to human chromosome 7p11.2. Chromosomal region 7p12 is amplified in approximately 40% of glioblastomas, the most common and malignant form of central nervous system tumor. Human chromosome 7 houses over 1,000 genes and comprises nearly 5% of the human genome. Defects in some of the genes localized to chromosome 7 have been linked to Osteogenesis imperfecta, Williams-Beuren syndrome, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

1. Seroussi, E., et al. 1998. Characterization of the human NIPSNAP1 gene from 22q12: a member of a novel gene family. Gene 212: 13-20.
2. Wang, X.Y., et al. 1998. GBAS, a novel gene encoding a protein with tyrosine phosphorylation sites and a transmembrane domain, is co-amplified with EGFR. Genomics 49: 448-451.
3. Lopez-Gines, C., et al. 2005. Association of chromosome 7, chromosome 10 and EGFR gene amplification in glioblastoma multiforme. Clin. Neuropathol. 24: 209-218.
4. Ruano, Y., et al. 2006. Identification of novel candidate target genes in amplicons of Glioblastoma multiforme tumors detected by expression and CGH microarray profiling. Mol. Cancer 5: 39.
5. Lo, K.C., et al. 2007. Candidate glioblastoma development gene identification using concordance between copy number abnormalities and gene expression level changes. Genes Chromosomes Cancer 46: 875-894.
6. Necesalová, E., et al. 2007. Incidence of the main genetic markers in glioblastoma multiforme is independent of tumor topology. Neoplasma 54: 212-218.

CHROMOSOMAL LOCATION

Genetic locus: GBAS (human) mapping to 7p11.2; Gbas (mouse) mapping to 5 G1.3.

SOURCE

NIPSNAP2 (Y-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NIPSNAP2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138478 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NIPSNAP2 (Y-12) is recommended for detection of NIPSNAP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with NIPSNAP1, NIPSNAP3A or NIPSNAP3B; may cross-react with D4ST in mouse or rat.

Suitable for use as control antibody for NIPSNAP2 siRNA (h): sc-89886, NIPSNAP2 siRNA (m): sc-149979, NIPSNAP2 shRNA Plasmid (h): sc-89886-SH, NIPSNAP2 shRNA Plasmid (m): sc-149979-SH, NIPSNAP2 shRNA (h) Lentiviral Particles: sc-89886-V and NIPSNAP2 shRNA (m) Lentiviral Particles: sc-149979-V.

Molecular Weight of NIPSNAP2: 34 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.