

NIPA2 (D-14): sc-79657

BACKGROUND

NIPA2 (non imprinted in Prader-Willi/Angelman syndrome 2) is a 360 amino acid multi-pass membrane protein that is widely expressed and may be involved in the pathogenesis of Prader-Willi syndrome. The gene encoding NIPA2 maps to human chromosome 15, which encodes over 700 genes and comprises nearly 3% of the human genome. Angelman and Prader-Willi syndromes are associated with loss of function or deletion of genes in the 15q11.2 region. In the case of Angelman syndrome, this loss is due to inactivity of the maternal 15q11.2 encoded UBE3A gene in the brain by either chromosomal deletion or mutation. In cases of Prader-Willi syndrome, there is a partial or complete deletion of this region from the paternal copy of chromosome 15. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15. Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NIPA2 (human) mapping to 15q11.2; Nipa2 (mouse) mapping to 7 B5.

SOURCE

NIPA2 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NIPA2 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-79657 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NIPA2 (D-14) is recommended for detection of NIPA2 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).

NIPA2 (D-14) is also recommended for detection of NIPA2 in additional species, including equine and canine.

Suitable for use as control antibody for NIPA2 siRNA (h): sc-75919, NIPA2 siRNA (m): sc-75920, NIPA2 shRNA Plasmid (h): sc-75919-SH, NIPA2 shRNA Plasmid (m): sc-75920-SH, NIPA2 shRNA (h) Lentiviral Particles: sc-75919-V and NIPA2 shRNA (m) Lentiviral Particles: sc-75920-V.

Molecular Weight of NIPA2: 39 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.