

NPAL2 (K-15): sc-87331

BACKGROUND

Non-imprinted in Prader-Willi/Angelman syndrome (NIPA) proteins are highly conserved receptors or transporters. A family known as the NIPA-like domain containing (NPAL) proteins are closely related to the NIPA proteins, but most are uncharacterized and their functions are unknown. NPAL2 (NIPA-like domain containing 2), also known as NIPAL2, is a 368 amino acid multi-pass membrane protein belonging to the NIPA family and is encoded by a gene located on human chromosome 8. Human chromosome 8 consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NIPAL2 (human) mapping to 8q22.2; Nipal2 (mouse) mapping to 15 B3.1.

STORAGE

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

SOURCE

NPAL2 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of NPAL2 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-87331 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NPAL2 (K-15) is recommended for detection of NPAL2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 NPAL3.

NPAL2 (K-15) is also recommended for detection of NPAL2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for NPAL2 siRNA (h): sc-77753, NPAL2 siRNA (m): sc-150044, NPAL2 shRNA Plasmid (h): sc-77753-SH, NPAL2 shRNA Plasmid (m): sc-150044-SH, NPAL2 shRNA (h) Lentiviral Particles: sc-77753-V and NPAL2 shRNA (m) Lentiviral Particles: sc-150044-V.

Molecular Weight of NPAL2: 41 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

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.