SANTA CRUZ BIOTECHNOLOGY, INC.

SPTY2D1 (N-16): sc-248707

BACKGROUND

SPTY2D1 (SPT2 domain-containing protein 1), also known as protein SPT2 homolog or KU002155, is a 685 amino acid protein that belongs to the SPT2 family. Expressed as three isoforms produced by alternative splicing, SPTY2D1 is encoded by a gene that maps to human chromosome 11. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and β-thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SPTY2D1 (human) mapping to 11p15.1; Spty2d1 (mouse) mapping to 7 B4.

SOURCE

SPTY2D1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SPTY2D1 of human origin.

RESEARCH USE

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

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-248707 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SPTY2D1 (N-16) is recommended for detection of SPTY2D1 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).

SPTY2D1 (N-16) is also recommended for detection of SPTY2D1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for SPTY2D1 siRNA (h): sc-96336, SPTY2D1 siRNA (m): sc-153809, SPTY2D1 shRNA Plasmid (h): sc-96336-SH, SPTY2D1 shRNA Plasmid (m): sc-153809-SH, SPTY2D1 shRNA (h) Lentiviral Particles: sc-96336-V and SPTY2D1 shRNA (m) Lentiviral Particles: sc-153809-V.

Molecular Weight of SPTY2D1 isoforms: 76/74/40 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.

PROTOCOLS

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