SANTA CRUZ BIOTECHNOLOGY, INC.

NYD-SP29 (S-12): sc-137649



The Power to Question

BACKGROUND

NYD-SP29 (testis development protein NYD-SP29), also known as WDR63 (WD repeat-containing protein 63) is an 891 amino acid protein that exists as 2 isoforms produced by alternative splicing events. NYD-SP29 contains five WD repeats and is expressed in bronchial epithelium and testis. The gene encoding NYD-SP29 maps to human chromosome 1p22.3 and mouse chromosome 3 H2. Human chromosome 1 is the largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, including a large number of disease-associated genes such as those involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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- Blackwood, D.H., et al. 2001. Schizophrenia and affective disorders cosegregation with a translocation at chromosome 1q42 that directly disrupts brain-expressed genes: clinical and P300 findings in a family. Am. J. Hum. Genet. 69: 428-433.
- 3. Weise, A., et al. 2005. New insights into the evolution of chromosome 1. Cytogenet. Genome Res. 108: 217-222.
- 4. Marzin, Y., et al. 2006. Chromosome 1 abnormalities in multiple myeloma. Anticancer Res. 26: 953-959.
- Lonergan, K.M., et al. 2006. Identification of novel lung genes in bronchial epithelium by serial analysis of gene expression. Am. J. Respir. Cell Mol. Biol. 35: 651-661.
- Zariwala, M.A., et al. 2007. Genetic defects in ciliary structure and function. Annu. Rev. Physiol. 69: 423-450.

CHROMOSOMAL LOCATION

Genetic locus: WDR63 (human) mapping to 1p22.3; Wdr63 (mouse) mapping to 3 H2.

SOURCE

NYD-SP29 (S-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of NYD-SP29 of human origin.

STORAGE

Store at 4° C, **D0 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.

PRODUCT

Each vial contains 100 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137649 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NYD-SP29 (S-12) is recommended for detection of NYD-SP29 of human origin, WDR63 of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immuno-fluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other NYD-SP family members.

Suitable for use as control antibody for NYD-SP29 siRNA (h): sc-88291, WDR63 siRNA (m): sc-155304, NYD-SP29 shRNA Plasmid (h): sc-88291-SH, WDR63 shRNA Plasmid (m): sc-155304-SH, NYD-SP29 shRNA (h) Lentiviral Particles: sc-88291-V and WDR63 shRNA (m) Lentiviral Particles: sc-155304-V.

Molecular Weight of NYD-SP29 isoform 1: 103 kDa.

Molecular Weight of NYD-SP29 isoform 2: 98 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RESEARCH USE

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