SANTA CRUZ BIOTECHNOLOGY, INC.

WIT-1 (H-16): sc-51245

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Wilms' tumor is a neoplasm of the kidneys that usually occurs in children and is characterized by the presence of abortive tubules and glomeruli surrounded by a spindled cell stroma. The 11p13 Wilms tumor locus consists of two coordinately regulated transcripts, WT1 and WIT-1, which are mutated in Wilms' tumors. Wilms' tumor upstream neighbor 1 (WIT-1) is encoded by an intronless gene upstream of the Wilms' tumor 1 (WT1) gene, which is important for nephrogenesis and gonadal growth. The WT1 gene is bi-directionally transcribed from the same promoter region as WIT-1, which may function as an antisense regulator of WT1. WIT-1 and WT1 have the same temporal and cell-restricted expression pattern, although the expression of WIT-1 is less abundant. Methylation of the WIT-1 gene is implicated in hematologic malignancy of chemoresistant acute myeloid leukemia. Single nucleotide polymorphisms (SNPs) in the WIT-1 gene are significantly associated with focal segmental glomerulosclerosis.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: WIT1 (human) mapping to 11p13.

RESEARCH USE

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

SOURCE

WIT-1 (H-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of WIT-1 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-51245 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WIT-1 (H-16) is recommended for detection of WIT-1 of 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).

Suitable for use as control antibody for WIT-1 siRNA (h): sc-61802.

Molecular Weight of WIT-1: 10 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.