## SANTA CRUZ BIOTECHNOLOGY, INC.

# CNPY1 (T-16): sc-242485



The Power to Question

#### BACKGROUND

CNPY1 (canopy 1 homolog) is a 92 amino acid homolog of the zebrafish protein cnpy1, which plays a role in FGF signaling and localizes to the midbrain-hindbrain (MHB) boundary. Widely conserved in human, mouse, chick and *Xenopus laevis*, CNPY1 is suggested to modify FGF-1 in the endoplasmic reticulum in a saposin-like manner. The gene encoding CNPY1 maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders, including cases of acute myelogenous leukemia and myelodysplasia.

## REFERENCES

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- 4. Hirate, Y., et al. 2006. Canopy1, a novel regulator of FGF signaling around the midbrain-hindbrain boundary in zebrafish. Curr. Biol. 16: 421-427.
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- 7. Leone, G., et al. 2007. Therapy-related leukemia and myelodysplasia: susceptibility and incidence. Haematologica 92: 1389-1398.
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#### CHROMOSOMAL LOCATION

Genetic locus: CNPY1 (human) mapping to 7q36.3.

## SOURCE

CNPY1 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CNPY1 of human origin.

## **RESEARCH USE**

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

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242485 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

CNPY1 (T-16) is recommended for detection of CNPY1 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).

CNPY1 (T-16) is also recommended for detection of CNPY1 in additional species, including equine, canine and bovine.

Molecular Weight of CNPY1: 11 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) Immunofluo-rescence: 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.