# SANTA CRUZ BIOTECHNOLOGY, INC.

# Dapper3 (P-14): sc-167594



The Power to Question

#### BACKGROUND

Dapper3, also known as DACT3 (dapper, antagonist of  $\beta$ -catenin, homolog 3) or RRR1, is a 629 amino acid protein and mammalian homolog of the *Xenopus laevis* protein dapper. As a member of the dapper family, Dapper3 plays a role in postnatal brain development and contains a C-terminal PDZ-binding motif that facilitates interaction with the PDZ domains of DSH (Dishevelled) family proteins. As the predominant dapper family member found in adult brain, Dapper3 localizes to hippocampus, Purkinje cell layer and every layer of the dorsal forebrain and cerebral cortex and is also found in the developing murine central nervous system. Dapper3 is also expressed in uterus, ventral somites, branchial arch mesenchyme, aortic sac, aortic arches, limb bud mesenchyme and craniofacical mesenchyme. Mapping to human chromosome 19q13.32, Dapper3 has been identified as a negative regulator of Wnt/ $\beta$ -catenin signaling in colorectal cancer.

#### REFERENCES

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- Fisher, D.A., Kivimäe, S., Hoshino, J., Suriben, R., Martin, P.M., Baxter, N. and Cheyette, B.N. 2006. Three Dact gene family members are expressed during embryonic development and in the adult brains of mice. Dev. Dyn. 235: 2620-2630.
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#### CHROMOSOMAL LOCATION

Genetic locus: DACT3 (human) mapping to 19q13.32; Dact3 (mouse) mapping to 7 A2.

#### **STORAGE**

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

#### SOURCE

Dapper3 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Dapper3 of human origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-167594 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Dapper3 (P-14) is recommended for detection of Dapper3 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); non cross-reactive with Dapper1 or Dapper2.

Suitable for use as control antibody for Dapper3 siRNA (h): sc-97153, Dapper3 siRNA (m): sc-142876, Dapper3 shRNA Plasmid (h): sc-97153-SH, Dapper3 shRNA Plasmid (m): sc-142876-SH, Dapper3 shRNA (h) Lentiviral Particles: sc-97153-V and Dapper3 shRNA (m) Lentiviral Particles: sc-142876-V.

Molecular Weight of Dapper3: 65 kDa.

Positive Controls: mouse brain extract: sc-2253.

## **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.

## **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.