SANTA CRUZ BIOTECHNOLOGY, INC.

Dapper2 (N-14): sc-167591



The Power to Question

BACKGROUND

Dapper2, also known as DACT2 (dapper, antagonist of β -catenin, homolog 2), DPR2 or C6orf116, is a 774 amino acid protein that exists as multiple alternatively spliced isoforms and is a mammalian homolog of the *Xenopus laevis* protein dapper. Containing a C-terminal PDZ-binding motif, Dapper2 is thought to promote the lysosomal degradation of nodal receptors, possibly functioning to negatively regulate the nodal signaling pathway. The gene encoding Dapper2 maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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- Waxman, J.S., et al. 2004. Zebrafish Dapper1 and Dapper2 play distinct roles in Wnt-mediated developmental processes. Development 131: 5909-5921.
- Zhang, L., et al. 2004. Zebrafish Dpr2 inhibits mesoderm induction by promoting degradation of nodal receptors. Science 306: 114-117.
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CHROMOSOMAL LOCATION

Genetic locus: DACT2 (human) mapping to 6q27; Dact2 (mouse) mapping to 17 A2.

SOURCE

Dapper2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Dapper2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167591 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Dapper2 (N-14) is recommended for detection of Dapper2 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 Dapper3.

Suitable for use as control antibody for Dapper2 siRNA (h): sc-95473, Dapper2 siRNA (m): sc-142875, Dapper2 shRNA Plasmid (h): sc-95473-SH, Dapper2 shRNA Plasmid (m): sc-142875-SH, Dapper2 shRNA (h) Lentiviral Particles: sc-95473-V and Dapper2 shRNA (m) Lentiviral Particles: sc-142875-V.

Molecular Weight of Dapper2: 83 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.

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.