

# DAAM2 (N-17): sc-68298

## BACKGROUND

DAAM2 (disheveled associated activator of morphogenesis 2), also known as KIAA0381, is a widely expressed 1,068 amino acid protein that contains one DAD domain, one FH1 domain, one FH2 domain and one GBD domain, through which it may play a role in Wnt/frizzled-associated signaling events. The gene encoding DAAM2 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

- Nagase, T., Ishikawa, K., Nakajima, D., Ohira, M., Seki, N., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1997. Prediction of the coding sequences of unidentified human genes. VII. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. DNA Res. 4: 141-150.
- Habas, R., Kato, Y. and He, X. 2001. Wnt/frizzled activation of Rho regulates vertebrate gastrulation and requires a novel Formin homology protein DAAM1. Cell 107: 843-854.
- Katoh, M. and Katoh, M. 2003. Identification and characterization of human DAAM2 gene in silico. Int. J. Oncol. 22: 915-920.
- Kida, Y., Shiraishi, T. and Ogura, T. 2004. Identification of chick and mouse Daam1 and Daam2 genes and their expression patterns in the central nervous system. Brain Res. Dev. Brain Res. 153: 143-150.
- Nakaya, M.A., Habas, R., Biris, K., Dunty, W.C., Kato, Y., He, X. and Yamaguchi, T.P. 2004. Identification and comparative expression analyses of Daam genes in mouse and *Xenopus*. Gene Expr. Patterns 5: 97-105.
- Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 606627. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Hirata, H., Hinoda, Y., Nakajima, K., Kikuno, N., Yamamura, S., Kawakami, K., Suehiro, Y., Tabatabai, Z.L., Ishii, N. and Dahiya, R. 2009. Wnt antagonist gene polymorphisms and renal cancer. Cancer 115: 4488-4503.

## CHROMOSOMAL LOCATION

Genetic locus: DAAM2 (human) mapping to 6p21.2; Daam2 (mouse) mapping to 17 C.

## SOURCE

DAAM2 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of DAAM2 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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68298 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

DAAM2 (N-17) is recommended for detection of Disheveled-associated activator of morphogenesis 2 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).

DAAM2 (N-17) is also recommended for detection of Disheveled-associated activator of morphogenesis 2 in additional species, including equine and bovine.

Suitable for use as control antibody for DAAM2 siRNA (h): sc-62192, DAAM2 siRNA (m): sc-62193, DAAM2 shRNA Plasmid (h): sc-62192-SH, DAAM2 shRNA Plasmid (m): sc-62193-SH, DAAM2 shRNA (h) Lentiviral Particles: sc-62192-V and DAAM2 shRNA (m) Lentiviral Particles: sc-62193-V.

Molecular Weight (predicted) of DAAM2: 123 kDa.

Molecular Weight (observed) of DAAM2: 82 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **DAAM2 (E-1): sc-515129**, our highly recommended monoclonal alternative to DAAM2 (N-17).