

DAN (AT38G8): sc-517397

BACKGROUND

The DAN (differential screening-selected gene aberrative in neuroblastoma) protein family contains antagonists of bone morphogenetic protein (BMP) signaling that are expressed in the neural crest. All family members are secreted proteins that act as BMP antagonists in embryonic explants and are expressed in the proximal airway epithelium of the lung during embryonic development. This family includes the head-inducing factor Cerberus, the dorsalizing factor gremlin and the tumor suppressor DAN. DAN, also known as zinc finger protein DAN, NO3, DAND1 or neuroblastoma suppressor of tumorigenicity 1 (NBL1), is a secreted protein containing one C-terminal cysteine knot-like (CTCK) domain. It is produced in small neurons of the dorsal root ganglion and its expression is activated by MATH-1. In addition to antagonizing BMP signaling, DAN also antagonizes the action of TGF β . DAN is a possible tumor suppressor for human neuroblastoma; defects may result in or contribute to its progression. DAN may also be a neuromodulator in inflammatory pain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NBL1 (human) mapping to 1p36.13.

RESEARCH USE

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

SOURCE

DAN (AT38G8) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 18-181 of DAN of human origin.

PRODUCT

Each vial contains 100 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

DAN (AT38G8) is recommended for detection of DAN 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), flow cytometry (1 μ g per 1×10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DAN siRNA (h): sc-72320, DAN shRNA Plasmid (h): sc-72320-SH and DAN shRNA (h) Lentiviral Particles: sc-72320-V.

Molecular Weight of DAN: 19 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

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 for detailed protocols and support products.