# SANTA CRUZ BIOTECHNOLOGY, INC.

# DAND5 (M-14): sc-240289



The Power to Question

#### 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. DAND5 (DAN domain family, member 5), also known as Cerl-2 (cerberus-like protein 2), CKTSF1B3 (cysteine knot superfamily 1, BMP antagonist 3) or Gremlin-3, is a 189 amino acid member of the DAN protein family. DAND5 is a secreted protein that contains one CTCK (C-terminal cystine knot-like) domain. DAND5 is thought to play a role in the correct specification of the left-right axis during development. DAND5 may antagonize Nodal and BMP-4 signaling.

## REFERENCES

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- Avsian-Kretchmer, O. and Hsueh, A.J. 2004. Comparative genomic analysis of the eight-membered ring cystine knot-containing bone morphogenetic protein antagonists. Mol. Endocrinol. 18: 1-12.
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#### CHROMOSOMAL LOCATION

Genetic locus: Dand5 (mouse) mapping to 8 C3.

#### SOURCE

DAND5 (M-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DAND5 of mouse origin.

#### 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-240289 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

DAND5 (M-14) is recommended for detection of DAND5 of mouse and rat 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).

Suitable for use as control antibody for DAND5 siRNA (m): sc-142871, DAND5 shRNA Plasmid (m): sc-142871-SH and DAND5 shRNA (m) Lentiviral Particles: sc-142871-V.

Molecular Weight of DAND5: 20 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-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.

## **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.