# SANTA CRUZ BIOTECHNOLOGY, INC.

# DNAM-1 (C-20): sc-6145



# BACKGROUND

The T cell antigen receptor (TCR) recognizes foreign antigens and translates such recognition events into intracellular signals that elicit a change in the cell from a dormant to an activated state. Additional proteins termed "accessory molecules" are also required for activation and for cytotoxic T lymphocyte (CTL)-mediated cytotoxicity. For instance, CD2, CD4, CD8, LFA-1, and CD28 are examples of well characterized accessory molecules. An accessory molecule designated DNAX accessory molecule-1 or DNAM-1 has been described. DNAM-1 is a transmembrane glycoprotein that is 318 amino acids in length and contains 2 immunoglobulin-like domains. DNAM-1 is expressed on both T cells and natural killer (NK) cells and participates in primary adhesion during CTL-mediated cytotoxicity.

# REFERENCES

- Arthos, J., Deen, K.C., Chaikin, M.A., Fornwald, J.A., Sathe, G., Sattentau, Q.J., Clapham, P.R., Weiss, R.A., McDougal, J.S. and Pietropaolo, C. 1989. Identification of the residues in human CD4 critical for the binding of HIV. Cell 57: 469-481.
- Weiss, A., Irving, B.A., Tan, L.K. and Koretzky, G.A. 1991. Signal transduction by the T cell antigen receptor. Sem. Imm. 3: 313-324.

## CHROMOSOMAL LOCATION

Genetic locus: CD226 (human) mapping to 18q22.2

# SOURCE

DNAM-1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of DNAM-1 of human 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-6145 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

DNAM-1 (C-20) is recommended for detection of DNAM-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

DNAM-1 (C-20) is also recommended for detection of DNAM-1 in additional species, including equine and porcine.

Suitable for use as control antibody for DNAM-1 siRNA (h): sc-35202, DNAM-1 shRNA Plasmid (h): sc-35202-SH and DNAM-1 shRNA (h) Lentiviral Particles: sc-35202-V.

Molecular Weight of DNAM-1: 65 kDa.

Positive Controls: human platelet extract: sc-363773, CCRF-CEM cell lysate: sc-2225 or Jurkat whole cell lysate: sc-2204.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

#### DATA



DNAM-1 (C-20): sc-6145. Western blot analysis of DNAM-1 expression in CCRF-CEM (A) and Jurkat (B) whole cell lysates.

#### **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.

# MONOS Satisfation Guaranteed

Try DNAM-1 (D-11): sc-376736 or DNAM-1 (11A8):

sc-53581, our highly recommended monoclonal alternatives to DNAM-1 (C-20).