## SANTA CRUZ BIOTECHNOLOGY, INC.

# DcR3 (37A565): sc-52918



## BACKGROUND

Tumor necrosis factor (TNF) is a pleiotropic cytokine whose function is mediated by two distinct cell surface receptors, designated TNF-R1 and TNF-R2, which are expressed on most cell types. TNF function is primarily mediated through TNF-R1 signaling. Both receptors belong to the growing TNF receptor superfamily which includes FAS antigen and CD40. TNF-R1 contains a cytoplasmic motif, termed the "death domain," that has been found to be necessary for the transduction of the apoptotic signal. The death domain is also found in several other receptors, including FAS, DR2 (or TRUNDD), DR3 (Death receptor 3), DR4, DR5 and DR6. TRUNDD, DR4 and DR5 are receptors for the apoptosis-inducing cytokine TRAIL. Non-death domain-containing receptors, designated decoy receptor 1 (DcR1) or TRID, DcR2 and DcR3, associate with specific ligands and may play a role in cellular resistance to apoptotic stimuli.

#### REFERENCES

- Tartaglia, L.A., Ayers, T.M., Wong, G.H. and Goeddel, D.V. 1993. A novel domain within the 55 kDa TNF receptor signals cell death. Cell 74: 845-853.
- Smith, C.A., Farrah, T. and Goodwin, R.G. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. Cell 76: 959-962.
- 3. Nagata, S. and Golstein, P. 1995. The FAS death factor. Science 267: 1449-1456.
- Kitson, J., Raven, T., Jiang, Y.P., Goeddel, D.V., Giles, K.M., Pun, K.T., Grinham, C.J., Brown, R. and Farrow, S.N. 1996. A death-domain-containing receptor that mediates apoptosis. Nature 384: 372-375.
- Pan, G., O'Rourke, K., Chinnaiyan, A.M., Gentz, R., Ebner, R., Ni, J. and Dixit, V.M. 1997. The receptor for the cytotoxic ligand TRAIL. Science 276: 111-113.
- Pan, G., Ni, J., Wei, Y.F., Yu, G.L., Gentz, R. and Dixit, V.M. 1997. An antagonist decoy receptor and a death domain-containing receptor for TRAIL. Science 277: 815-818.
- Sheridan, J.P., Marsters, S.A., Pitti, R.M., Gurney, A., Skubatch, M., Baldwin, D., Ramakrishnan, L., Gray, C.L., Baker, K., Wood, W.I., Goddard, A.D., Godowski, P. and Ashkenazi, A. 1997. Control of TRAIL-induced apoptosis by a family of signaling and decoy receptors. Science 277: 818-821.
- Marsters, S.A., Sheridan, J.P., Pitti, R.M., Huang, A., Skubatch, M., Baldwin, D., Yuan, J., Gurney, A., Goddard, A.D., Godowski, P. and Ashkenazi, A. 1997. A novel receptor for APO-2L/TRAIL contains a truncated death domain. Curr. Biol. 7: 1003-1006.
- Pan, G., Ni, J. and Dixit, V.M. 1998. TRUNDD, a new member of the TRAIL receptor family that antagonizes TRAIL signalling. FEBS Lett. 424: 41-45.

## CHROMOSOMAL LOCATION

Genetic locus: TNFRSF6B (human) mapping to 20q13.3.

## SOURCE

DcR3 (37A565) is a mouse monoclonal antibody raised against full length DcR3 of human origin.

### PRODUCT

Each vial contains 100  $\mu g~lgG_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

DcR3 (37A565) is recommended for detection of DcR3 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of DcR3: 33 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, Jurkat + PMA/0K73 whole cell lysate or ALL-SIL whole cell lysate.

## DATA





DcR3 (37A565): sc-52918. Western blot analysis of DcR3 expression in non-transfected: sc-110760 (A) and human DcR3 transfected: sc-113152 (B) 293 whole cell lysates.

DcR3 (37A565): sc-52918. Western blot analysis of DcR3 expression in non-transfected: sc-117752 (**A**) and human DcR3 transfected: sc-113839 (**B**) 293T 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 for detailed protocols and support products.