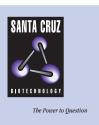
SANTA CRUZ BIOTECHNOLOGY, INC.

DcR2 (B-R27): sc-65311



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 TNF-R1 and TNF-R2 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 (DcRI 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.
- 2. 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 Apo2L/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: TNFRSF10D (human) mapping to 8p21.3.

SOURCE

DcR2 (B-R27) is a mouse monoclonal antibody raised against recombinant TRAIL R4/Fc chimera of human origin.

PRODUCT

Each vial contains 100 μg lgG $_1$ in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and 1% BSA.

Available as phycoerythrin conjugate for flow cytometry, sc-65311 PE, 100 tests.

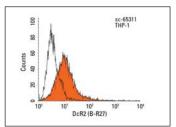
APPLICATIONS

DcR2 (B-R27) is recommended for detection of DcR2 of human origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for DcR2 siRNA (h): sc-35185, DcR2 shRNA Plasmid (h): sc-35185-SH and DcR2 shRNA (h) Lentiviral Particles: sc-35185-V.

Molecular Weight of DcR2: 42 kDa.

DATA



DcR2 (B-R27): sc-65311. FCM analysis of THP-1 cell line showing strain specificity of THP-1 followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG₁: sc-3877.

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.