DR5 (7F4-F8-G11): sc-517559



The Power to Question

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 and DR5. TRUNDD, DR4 and DR5 are receptors for the apoptosis-inducing cytokine TRAIL. A non-death domain-containing receptor, designated decoy receptor (DcR1 or TRID), also specifically associates with TRAIL 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 kd 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.
- 8. 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: TNFRSF10B (human) mapping to 8p21.3; Tnfrsf10b (mouse) mapping to 14 D2.

SOURCE

DR5 (7F4-F8-G11) is a mouse monoclonal antibody raised against recombinant DR5 protein fragments of human origin.

PRODUCT

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

APPLICATIONS

DR5 (7F4-F8-G11) is recommended for detection of DR5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for DR5 siRNA (h): sc-40237, DR5 siRNA (m): sc-40238, DR5 shRNA Plasmid (h): sc-40237-SH, DR5 shRNA Plasmid (m): sc-40238-SH, DR5 shRNA (h) Lentiviral Particles: sc-40237-V and DR5 shRNA (m) Lentiviral Particles: sc-40238-V.

Molecular Weight of DR5: 48 kDa.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com