

# DR5 (h): 293 Lysate: sc-110563

## 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

1. Tartaglia, L.A., Ayres, 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.
4. 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.
5. Pan, G., O'Rourke, K., Chinnaiyan, A., Gentz, R., Ebner, R., Ni, J. and Dixit, V. 1997. The receptor for the cytotoxic ligand TRAIL. *Science* 276: 111-113.
6. Pan, G., Ni, J., Wei, Y.F., Yu, G., Gentz, R. and Dixit, V.M. 1997. An antagonist decoy receptor and a death domain-containing receptor for TRAIL. *Science* 277: 815-818.
7. Sheridan, J., Marsters, S., Pitti, R., Gurney, A., Skubatch, M., Baldwin, D., Ramakrishnan, L., Gray, C., Baker, K., Wood, W., Goddard, A., 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., Yu, G., Wei, Y.F. 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.

## PRODUCT

DR5 (h): 293 Lysate represents a lysate of human DR5 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

DR5 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive DR5 antibodies.

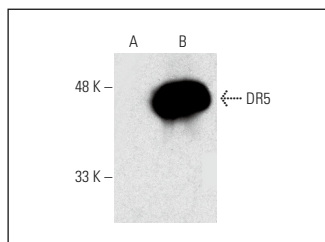
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

DR5 (D-6): sc-166624 is recommended as a positive control antibody for Western Blot analysis of enhanced human DR5 expression in DR5 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



DR5 (D-6) HRP: sc-166624 HRP. Direct western blot analysis of DR5 expression in non-transfected: sc-110760 (A) and human DR5 transfected: sc-110563 (B) 293 whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.