DcR3 (A-9): sc-398892

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BIOTECHNOLOGY

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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

1. Tartaglia, L.A., et al. 1993. A novel domain within the 55 kd TNF receptor signals cell death. Cell 74: 845-853.

2. Smith, C.A., et al. 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., et al. 1996. A death-domain-containing receptor that mediates apoptosis. Nature 384: 372-375.

5. Pan, G., et al. 1997. The receptor for the cytotoxic ligand TRAIL. Science 276: 111-113.

6. Pan, G., et al. 1997. An antagonist decoy receptor and a death domain-containing receptor for TRAIL. Science 277: 815-818.

7. Sheridan, J.P., et al. 1997. Control of TRAIL-induced apoptosis by a family of signaling and decoy receptors. Science 277: 818-821.

8. Marsters, S.A., et al. 1997. A novel receptor for Apo2L/TRAIL contains a truncated death domain. Curr. Biol. 7: 1003-1006.

9. Pan, G., et al. 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 20q13.33.

SOURCE

DcR3 (A-9) is a mouse monoclonal antibody raised against amino acids 171-300 of DcR3 of human origin.

PRODUCT

Each vial contains 200 µg IgG$_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

DcR3 (A-9) is recommended for detection of DcR3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for DcR3 siRNA (h): sc-40236, DcR3 shRNA Plasmid (h): sc-40236-SH and DcR3 shRNA (h) Lentiviral Particles: sc-40236-V.

Molecular Weight of DcR3: 33 kDa.

Positive Controls: DcR3 (h2): 293T Lysate: sc-113839 or MIA PaCa-2 cell lysate: sc-2285.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA
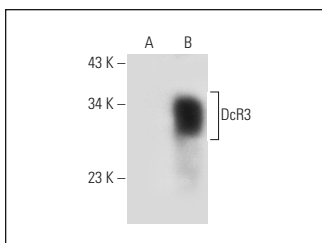
DcR3 (A-9): sc-398892. Western blot analysis of DcR3 expression in non-transfected: sc-117752 (**A**) and human DcR3 transfected: sc-113839 (**B**) 293T whole cell lysates.
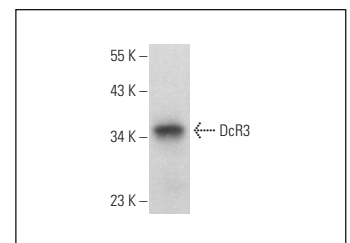
DcR3 (A-9): sc-398892. Western blot analysis of DcR3 expression in MIA PaCa-2 whole cell lysate.

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.