

DcR2 (D-15): sc-11638

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 (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 kDa 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., et al. 1995. The FAS death factor. *Science* 267: 1449-1456.

CHROMOSOMAL LOCATION

Genetic locus: TNFRSF10D (human) mapping to 8p21.3.

SOURCE

DcR2 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DcR2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-11638 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DcR2 (D-15) is recommended for detection of DcR2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 DcR2 siRNA (h): sc-35185, DcR2 shRNA Plasmid (h): sc-35185-SH and DcR2 shRNA (h) Lentiviral Particles: sc-35185-V.

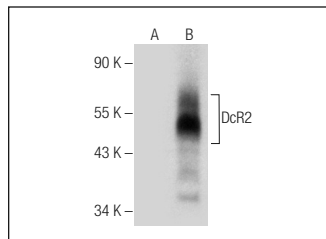
Molecular Weight of DcR2: 42 kDa.

Positive Controls: U-937 cell lysate: sc-2239, THP-1 cell lysate: sc-2238 or DcR2 (h): 293T Lysate: sc-371573.

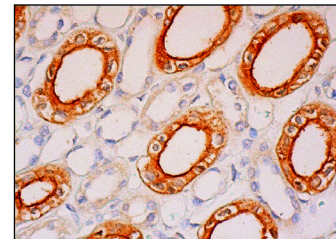
STORAGE

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

DATA



DcR2 (D-15): sc-11638. Western blot analysis of DcR2 expression in non-transfected: sc-117752 (A) and human DcR2 transfected: sc-371573 (B) 293T whole cell lysates.



DcR2 (D-15): sc-11638. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing membrane and cytoplasmic staining of cells in tubules.

SELECT PRODUCT CITATIONS

1. Vindrieux, D., et al. 2006. TNF α -related apoptosis-inducing ligand decoy receptor DcR2 is targeted by androgen action in the rat ventral prostate. *J. Cell. Physiol.* 206: 709-717.
2. Cantarella, G., et al. 2007. Trail interacts redundantly with nitric oxide in rat astrocytes: potential contribution to neurodegenerative processes. *J. Neuroimmunol.* 182: 41-47.
3. Ouellet, V., et al. 2007. An apoptotic molecular network identified by microarray: on the TRAIL to new insights in epithelial ovarian cancer. *Cancer* 110: 297-308.
4. Huang, B., et al. 2009. Pharmacologic p53 activation blocks cell cycle progression but fails to induce senescence in epithelial cancer cells. *Mol. Cancer Res.* 7: 1497-1509.
5. Zhu, C., et al. 2011. Effects of estrogen on stress-induced premature senescence of vascular smooth muscle cells: a novel mechanism for the "time window theory" of menopausal hormone therapy. *Atherosclerosis* 215: 294-300.

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.



Try **DcR2 (B-P30): sc-65310**, our highly recommended monoclonal alternative to DcR2 (D-15).