

# DR4 (B-9): sc-8411

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: TNFRSF10A (human) mapping to 8p21.3.

## SOURCE

DR4 (B-9) is a mouse monoclonal antibody raised against amino acids 1-130 mapping at the N-terminus of DR4 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DR4 (B-9) is available conjugated to agarose (sc-8411 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8411 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8411 PE), fluorescein (sc-8411 FITC), Alexa Fluor® 488 (sc-8411 AF488), Alexa Fluor® 546 (sc-8411 AF546), Alexa Fluor® 594 (sc-8411 AF594) or Alexa Fluor® 647 (sc-8411 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8411 AF680) or Alexa Fluor® 790 (sc-8411 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

DR4 (B-9) is recommended for detection of DR4 of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for DR4 siRNA (h): sc-35218, DR4 shRNA Plasmid (h): sc-35218-SH and DR4 shRNA (h) Lentiviral Particles: sc-35218-V.

Molecular Weight of DR4: 56 kDa.

Positive Controls: DR4 (h): 293 Lysate: sc-112977 or HeLa whole cell lysate: sc-2200.

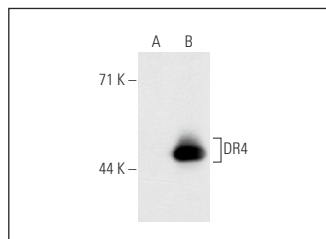
## RESEARCH USE

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

## STORAGE

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

## DATA



DR4 (B-9): sc-8411. Western blot analysis of DR4 expression in non-transfected: sc-110760 (A) and human DR4 transfected: sc-112977 (B) 293 whole cell lysates.

## SELECT PRODUCT CITATIONS

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- Lee, H.P., et al. 2012. Curcumin induces cell apoptosis in human chondrosarcoma through extrinsic death receptor pathway. *Int. Immunopharmacol.* 13: 163-169.
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- Qi, Z., et al. 2016.  $\beta$ -arrestin2 regulates TRAIL-induced Hep G2 cell apoptosis via the Src-extracellular signal-regulated signaling pathway. *Mol. Med. Rep.* 14: 263-270.
- Zhou, Y., et al. 2017. Pifithrin- $\mu$  is efficacious against non-small cell lung cancer via inhibition of heat shock protein 70. *Oncol. Rep.* 37: 313-322.
- Song, D., et al. 2018. *Pseudomonas aeruginosa* quorum-sensing metabolite induces host immune cell death through cell surface lipid domain dissolution. *Nat. Microbiol.* 4: 97-111.
- De Blasio, A., et al. 2019. Loss of MCL1 function sensitizes the MDA-MB-231 breast cancer cells to rh-TRAIL by increasing DR4 levels. *J. Cell. Physiol.* 234 18432-18447.

## PROTOCOLS

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