DR5 (C-20): sc-7191



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.

CHROMOSOMAL LOCATION

Genetic locus: TNFRSF10B (human) mapping to 8p21.3.

SOURCE

DR5 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of DR5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-7191 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DR5 (C-20) is recommended for detection of DR5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 DR5 siRNA (h): sc-40237, DR5 shRNA Plasmid (h): sc-40237-SH and DR5 shRNA (h) Lentiviral Particles: sc-40237-V.

Molecular Weight of DR5: 48 kDa.

Positive Controls: DR5 (h): 293 Lysate: sc-110563 or BJAB whole cell lysate: sc-2207.

STORAGE

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

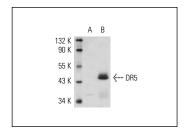
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

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

DATA



DR5 (C-20): sc-7191. Western blot analysis of DR5 expression in non-transfected: sc-110760 (**A**) and human DR5 transfected: sc-110563 (**B**) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

- Clarke, P., et al. 2000. Reovirus-induced apoptosis is mediated by TRAIL. J. Virol. 74: 8135-8139.
- Chang, M.S., et al. 2005. Differential protein expression between esophageal squamous cell carcinoma and dysplasia, and prognostic significance of protein markers. Pathol. Res. Pract. 201: 417-425.
- Sasaki, H., et al. 2007. A novel selective progesterone receptor modulator asoprisnil activates tumor necrosis factor-related apoptosis-inducing ligand (TRAIL)-mediated signaling pathway in cultured human uterine leiomyoma cells in the absence of comparable effects on myometrial cells. J. Clin. Endocrinol. Metab. 92: 616-623.
- Buttmann, M., et al. 2007. Interferon-β is a potent inducer of interferon regulatory factor-1/2-dependent IP-10/CXCL10 expression in primary human endothelial cells. J. Vasc. Res. 44: 51-60.
- Chang, M.S., et al. 2007. Role and prognostic significance of proapoptotic proteins in Epstein-Barr virus-infected gastric carcinomas. Anticancer Res. 27: 785-791.
- 6. Zhang, H.Y., et al. 2010. Tumor-targeted delivery of biologically active TRAIL protein. Cancer Gene Ther. 17: 334-343.
- Li, P., et al. 2010. Akt-phosphorylated mitogen-activated kinase-activating death domain protein (MADD) inhibits TRAIL-induced apoptosis by blocking Fas-associated death domain (FADD) association with death receptor 4. J. Biol. Chem. 285: 22713-22722.
- 8. Anees, M., et al. 2011. Recurrence-free survival in prostate cancer is related to increased stromal TRAIL expression. Cancer 117: 1172-1182.

MONOS Satisfation Guaranteed Try **DR5 (D-6):** sc-166624 or **DR5 (B-D37):** sc-65314, our highly recommended monoclonal aternatives to DR5 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **DR5 (D-6):** sc-166624.