

DR6 (E-4): sc-376873

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 the 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. 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., 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.
4. Kitson, J., et al. 1996. A death-domain-containing receptor that mediates apoptosis. *Nature* 384: 372-375.

CHROMOSOMAL LOCATION

Genetic locus: TNFRSF21 (human) mapping to 6p12.3; Tnfrsf21 (mouse) mapping to 17 B3.

SOURCE

DR6 (E-4) is a mouse monoclonal antibody raised against amino acids 71-220 of DR6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DR6 (E-4) is available conjugated to agarose (sc-376873 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376873 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376873 PE), fluorescein (sc-376873 FITC), Alexa Fluor® 488 (sc-376873 AF488), Alexa Fluor® 546 (sc-376873 AF546), Alexa Fluor® 594 (sc-376873 AF594) or Alexa Fluor® 647 (sc-376873 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376873 AF680) or Alexa Fluor® 790 (sc-376873 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

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

APPLICATIONS

DR6 (E-4) is recommended for detection of DR6 of mouse, rat and 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), 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 DR6 siRNA (h): sc-35220, DR6 siRNA (m): sc-35221, DR6 shRNA Plasmid (h): sc-35220-SH, DR6 shRNA Plasmid (m): sc-35221-SH, DR6 shRNA (h) Lentiviral Particles: sc-35220-V and DR6 shRNA (m) Lentiviral Particles: sc-35221-V.

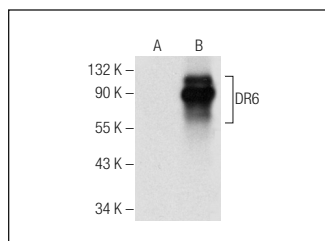
Molecular Weight of DR6: 82 kDa.

Positive Controls: DR6 (h): 293T Lysate: sc-173778, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

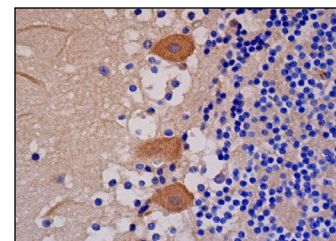
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



DR6 (E-4): sc-376873. Western blot analysis of DR6 expression in non-transfected: sc-117752 (A) and human DR6 transfected: sc-173778 (B) 293T whole cell lysates.



DR6 (E-4): sc-376873. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing cytoplasmic staining of Purkinje cells.

SELECT PRODUCT CITATIONS

1. Pan, H., et al. 2019. TNFRSF21 mutations cause high myopia. *J. Med. Genet.* 56: 671-677.

RESEARCH USE

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