**BACKGROUND**

Tumor necrosis factor (TNF) is a pleiotropic cytokine whose function is mediated through two distinct cell surface receptors. These receptors, designated TNF-R1 and TNF-R2, are expressed on most cell types. The majority of TNF functions are primarily mediated through TNF-R1, while signaling through TNF-R2 occurs less extensively and is confined to cells of the immune system. Both of these proteins belong to the growing TNF and nerve growth factor (NGF) receptor superfamily, which includes Fas, CD30, CD27 and CD40. The members of this superfamily are type I membrane proteins that share sequence homology confined to the extracellular region. TNF-R1 shares a motif termed the “death domain” with Fas and three structurally unrelated signaling proteins, TRADD, FADD and RIP. This death domain is required for transduction of the apoptotic signal.

**CHROMOSOMAL LOCATION**

Genetic locus: TNFRSF1B (human) mapping to 1p36.22; Tnfrsf1b (mouse) mapping to 4 E1.

**SOURCE**

TNF-R2 (D-2) is a mouse monoclonal antibody raised against amino acids 260-461 mapping at the C-terminus of TNF-R2 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TNF-R2 (D-2) is available conjugated to agarose (sc-8041 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8041 HRP), 200 μg/ml, for WB, IHOP and ELISA; to either phycoerythrin (sc-8041 PE), fluorescein (sc-8041 FITC), Alexa Fluor® 488 (sc-8041 AF488), Alexa Fluor® 546 (sc-8041 AF546), Alexa Fluor® 594 (sc-8041 AF594) or Alexa Fluor® 647 (sc-8041 AF647), 200 μg/ml, for WB (RGB), IF, IHOP and FCM; and to either Alexa Fluor® 680 (sc-8041 AF680) or Alexa Fluor® 790 (sc-8041 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

TNF-R2 (D-2) is recommended for detection of TNF-R2 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 TNF-R2 siRNA (h): sc-36689, TNF-R2 siRNA (m): sc-36609, TNF-R2 shRNA Plasmid (h): sc-36689-SH, TNF-R2 shRNA Plasmid (m): sc-36690-SH, TNF-R2 shRNA (h) Lentiviral Particles: sc-36689-V and TNF-R2 shRNA (m) Lentiviral Particles: sc-36690-V.

Molecular Weight of TNF-R2: 75 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, SK-BR-3 cell lysate: sc-2218 or MCF7 whole cell lysate: sc-2206.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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