

TRAIL (H-257): sc-7877

BACKGROUND

Proteins belonging to the tumor necrosis factor (TNF) superfamily are potent mediators of inflammation and of the immune system. Members of the TNF superfamily include TNF β , lymphotoxin β (LT β), CD40L, CD30L, CD27L, Ox40L, 4-1BBL and FAS-L (APO-1). Most TNF family members are type II transmembrane proteins that are proteolytically processed at their carboxy-terminal extracellular domain to form a soluble homotrimeric molecule. The extracellular domain of an additional TNF family member, designated TNF-related apoptosis-inducing ligand (TRAIL) or APO-2L, exhibits 14-28% homology with other members of the TNF family. Like soluble FAS-L, soluble TRAIL will induce apoptosis. The morphological and cellular changes caused by the introduction of soluble TRAIL to Jurkat cells are indistinguishable from those caused by the introduction of soluble FAS-L. Unlike FAS-L, whose expression is more or less restricted to activated T cells, significant levels of TRAIL are observed in many tissues and it is constitutively expressed by some cell lines.

CHROMOSOMAL LOCATION

Genetic locus: TNFSF10 (human) mapping to 3q26.31; Tnfsf10 (mouse) mapping to 3 A3.

SOURCE

TRAIL (H-257) is a rabbit polyclonal antibody raised against amino acids 25-281 mapping at the C-terminus of TRAIL of human origin.

PRODUCT

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

APPLICATIONS

TRAIL (H-257) is recommended for detection of TRAIL of mouse, rat and 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 TRAIL siRNA (h): sc-36719, TRAIL siRNA (m): sc-37271, TRAIL shRNA Plasmid (h): sc-36719-SH, TRAIL shRNA Plasmid (m): sc-37271-SH, TRAIL shRNA (h) Lentiviral Particles: sc-36719-V and TRAIL shRNA (m) Lentiviral Particles: sc-37271-V.

Molecular Weight of TRAIL: 34 kDa.

Molecular Weight of soluble TRAIL: 20 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, Jurkat whole cell lysate: sc-2204 or A549 cell lysate: sc-2413.

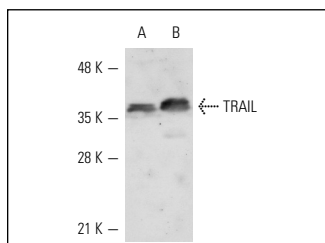
STORAGE

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

RESEARCH USE

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

DATA



TRAIL (H-257): sc-7877. Western blot analysis of TRAIL expression in A549 (A) and AT-3 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Ozawa, F., et al. 2001. Effects and expression of TRAIL and its apoptotic-promoting receptors in human pancreatic cancer. *Cancer Lett.* 163: 71-81.
- Kagawa, S., et al. 2001. Antitumor activity and bystander effects of the tumor necrosis factor-related apoptosis-inducing ligand (TRAIL) gene. *Cancer Res.* 61: 3330-3338.
- Fecker, L.F., et al. 2011. Efficient melanoma cell killing and reduced melanoma growth in mice by a selective replicating adenovirus armed with tumor necrosis factor-related apoptosis-inducing ligand. *Hum. Gene Ther.* 22: 405-417.
- Kwon, O.J., et al. 2011. Viral genome DNA/lipoplexes elicit *in situ* oncolytic viral replication and potent antitumor efficacy via systemic delivery. *J. Control. Release* 155: 317-325.
- Tochitani, T., et al. 2011. 5-azacytidine, a chemotherapeutic drug, induces TRAIL-mediated apoptosis in mouse thymocytes *in vivo*. *Exp. Toxicol. Pathol.* 63: 237-242.
- Bogazzi, F., et al. 2011. Cardiac extrinsic apoptotic pathway is silent in young but activated in elder mice overexpressing bovine GH: interplay with the intrinsic pathway. *J. Endocrinol.* 210: 231-238.
- Russo, A., et al. 2012. Effect of viciginin and protolichesterinic acid on human prostate cancer cells: role of Hsp70 protein. *Chem. Biol. Interact.* 195: 1-10.
- Zhu, S., et al. 2013. Inhibiting autophagy potentiates the anticancer activity of IFN1 α /IFN α in chronic myeloid leukemia cells. *Autophagy* 9: 317-327.



Try **TRAIL (D-3): sc-8440** or **TRAIL (RIK-2): sc-56246**, our highly recommended monoclonal alternatives to TRAIL (H-257).