# TRAIL (C-19): sc-1889



The Power to Question

#### **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 $\beta$ , lymphotoxin  $\beta$  (LT $\beta$ ), 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.

#### SOURCE

TRAIL (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TRAIL of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1889 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

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

## **APPLICATIONS**

TRAIL (C-19) is recommended for detection of TRAIL of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

TRAIL (C-19) is also recommended for detection of TRAIL in additional species, including equine and porcine.

Suitable for use as control antibody for TRAIL siRNA (h): sc-36719, TRAIL shRNA Plasmid (h): sc-36719-SH and TRAIL shRNA (h) Lentiviral Particles: sc-36719-V.

Molecular Weight of TRAIL: 34 kDa.

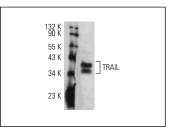
Molecular Weight of soluble TRAIL: 20 kDa.

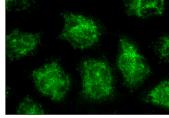
Positive Controls: A549 cell lysate: sc-2413, Jurkat whole cell lysate: sc-2204 or PC-3 cell lysate: sc-2220.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## **DATA**





TRAIL (C-19): sc-1889. Western blot analysis of TRAIL expression in A549 whole cell lysate.

TRAIL (C-19): sc-1889. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

## **SELECT PRODUCT CITATIONS**

- Lee, J., et al. 2002. Antitumor activity and prolonged expression from a TRAIL-expressing adenoviral vector. Neoplassia 4: 312-323.
- 2. Ma, H., et al. 2005. Oral adeno-associated virus-sTRAIL gene therapy suppresses human hepatocellular carcinoma growth in mice. Hepatology 42: 1355-1363.

# **RESEARCH USE**

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

#### **PROTOCOLS**

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



Try **TRAIL** (**D-3**): sc-8440 or **TRAIL** (**RIK-2**): sc-56246, our highly recommended monoclonal alternatives to TRAIL (C-19).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com