

# TRAIL (RIK-2): sc-56246

## 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 $\alpha$ , lymphotoxin  $\beta$  (LT $\beta$ ), CD40L, CD30L, CD27L, O $\alpha$ 40L, 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.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TNFSF10 (human) mapping to 3q26.31.

## SOURCE

TRAIL (RIK-2) is a mouse monoclonal antibody raised against TRAIL of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG $_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRAIL (RIK-2) is available conjugated to either phycoerythrin (sc-56246 PE) or fluorescein (sc-56246 FITC), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM.

## APPLICATIONS

TRAIL (RIK-2) is recommended for detection of TRAIL of human origin by flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

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 HL-60 whole cell lysate: sc-2209.

## SELECT PRODUCT CITATIONS

1. 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.
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## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.