

TRADD (h2): 293T Lysate: sc-170468

BACKGROUND

In contrast to growth factors which promote cell proliferation, FAS ligand (FAS-L) and the tumor necrosis factors (TNFs) rapidly induce apoptosis. Cellular response to FAS-L and TNF is mediated by structurally related receptors containing a conserved "death domain" and belonging to the TNF receptor superfamily. TRADD, FADD and RIP are FAS/TNF-R1 interacting proteins that contain a death domain homologous region (DDH). TRADD (TNF-R1-associated death domain) and FADD (FAS-associated death domain) associate with the death domains of both FAS and TNF-R1 via their DDH regions. Overexpression of TRADD leads to NF κ B activation and apoptosis in the absence of TNF. Overexpression of FADD causes apoptosis, which can be blocked by the bovine pox protein CrmA, suggesting that FADD lies upstream of ICE and possibly other serine proteases. The receptor interacting protein, RIP, associates with FAS exclusively via its DDH and this association is abrogated in lpr mutants. Unlike TRADD and FADD, RIP contains a putative amino terminal kinase domain.

REFERENCES

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3. Sato, T., et al. 1995. FAP-1: a protein tyrosine phosphatase that associates with FAS. *Science* 268: 411-414.
4. Hsu, H., et al. 1995. The TNF receptor 1-associated protein TRADD signals cell death and NF κ B activation. *Cell* 81: 495-504.
5. Chinnaiyan, A.M., et al. 1995. FADD, a novel death domain-containing protein, interacts with the death domain of FAS and initiates apoptosis. *Cell* 81: 505-512.
6. Stanger, B.Z., et al. 1995. RIP: a novel protein containing a death domain that interacts with FAS/APO-1 (CD95) in yeast and causes cell death. *Cell* 81: 513-523.
7. Hunter, I., et al. 2006. Spatial compartmentalization of tumor necrosis factor (TNF) receptor 1-dependent signaling pathways in human airway smooth muscle cells. Lipid rafts are essential for TNF α -mediated activation of RhoA but dispensable for the activation of the NF κ B and MAPK pathways. *J. Biol. Chem.* 281: 34705-34715.
8. Schneider-Brachert, W., et al. 2006. Inhibition of TNF receptor 1 internalization by adenovirus 14.7K as a novel immune escape mechanism. *J. Clin. Invest.* 116: 2901-2913.
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CHROMOSOMAL LOCATION

Genetic locus: TRADD (human) mapping to 16q22.1.

RESEARCH USE

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

PRODUCT

TRADD (h2): 293T Lysate represents a lysate of human TRADD transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

TRADD (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive TRADD antibodies. Recommended use: 10-20 μ l per lane.

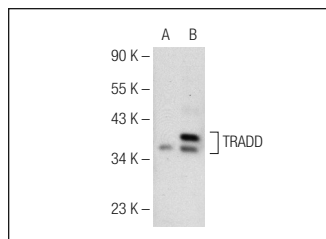
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TRADD (A-5): sc-46653 is recommended as a positive control antibody for Western Blot analysis of enhanced human TRADD expression in TRADD transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



TRADD (A-5): sc-46653. Western blot analysis of TRADD expression in non-transfected: sc-117752 (A) and human TRADD transfected: sc-170468 (B) 293T whole cell lysates.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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