

FADD (m): 293T Lysate: sc-126821

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 cow 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

1. Smith, C.A., et al. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation and death. *Cell* 76: 959-962.
2. Nagata, S., et al. 1995. The FAS death factor. *Science* 267: 1449-1456.
3. Sato, T., et al. 1995. FAP-1: a protein tyrosine phosphatase that associates with FAS. *Science* 268: 411-414.
4. Cleveland, J.L., et al. 1995. Contenders in FasL/TNF death signaling. *Cell* 81: 479-482.
5. Hsu, H., et al. 1995. The TNF receptor 1-associated protein TRADD signals cell death and NF κ B activation. *Cell* 81: 495-504.
6. 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.
7. 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.
8. Baker, S.J., et al. 1996. Transducers of life and death: TNF receptor superfamily and associated proteins. *Oncogene* 12: 1-9.

CHROMOSOMAL LOCATION

Genetic locus: Fadd (mouse) mapping to 7 F5.

PRODUCT

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

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.

RESEARCH USE

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

APPLICATIONS

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

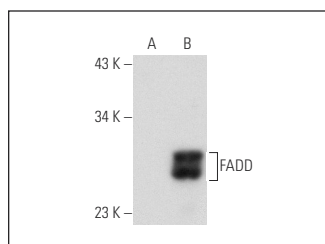
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

FADD (F-12): sc-166516 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse FADD expression in FADD transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

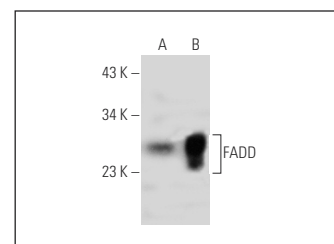
RECOMMENDED SUPPORT REAGENTS

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 MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



FADD (F-12): sc-166516. Western blot analysis of FADD expression in non-transfected: sc-117752 (A) and mouse FADD transfected: sc-126821 (B) 293T whole cell lysates.



FADD (G-4): sc-271748. Western blot analysis of FADD expression in non-transfected: sc-117752 (A) and mouse FADD transfected: sc-126821 (B) 293T whole cell lysates.

PROTOCOLS

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