



FADD (28-209): sc-4701

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

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4. Cleveland, J.L., et al. 1995. Contenders in FAS-L/TNF death signaling. *Cell* 81: 479-482.
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CHROMOSOMAL LOCATION

Genetic locus: FADD (human) mapping to 11q13.3; Fadd (mouse) mapping to 7 F5.

SOURCE

FADD (28-209) is expressed in *E. coli* as a 47 kDa tagged fusion protein corresponding to amino acids 28-209 of FADD of human origin.

PRODUCT

FADD (28-209) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 50 μ g purified protein in PBS containing 5 mM DTT and 50% glycerol.

APPLICATIONS

FADD (28-209) is suitable as a substrate for ERK 2: sc-4806 and as a Western blotting control for sc-5559 and sc-6036.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

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.