

Siva (H-9): sc-514375

BACKGROUND

A cytoplasmic domain of approximately 80 amino acids was identified in the apoptosis-mediating receptors TNFR1 and Fas. This region was determined to be necessary for the transduction of the apoptotic signal and was designated the "death domain". Other death domain-containing, but otherwise structurally unrelated, proteins have been identified on the basis of their ability to associate with the cytoplasmic domains of TNFR1 or FAS. FADD (also designated MORT1) and TRADD bind to Fas and TNFR1, respectively. RIP is a death domain-containing serine/threonine kinase that binds to TRADD. RAIDD (also designated CRADD) was identified as a RIP binding protein. Both RAIDD and FADD can associate with members of the caspase family, providing a link between the activation of the TNFRs and the triggering of the cysteine protease cascade. The death domain-containing protein SIVA binds to the TNFR family member CD27 and appears to play a role in CD27 mediated apoptosis.

REFERENCES

1. Tartaglia, L.A., et al. 1993. A novel domain within the 55 kDa TNF receptor signals cell death. *Cell* 74: 845-853.
2. Itoh, N., et al. 1993. A novel protein domain required for apoptosis. Mutational analysis of human Fas antigen. *J. Biol. Chem.* 268: 10932-10937.
3. 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.
4. Hsu, H., et al. 1996. TNF-dependent recruitment of the protein kinase RIP to the TNF receptor-1 signaling complex. *Immunity* 4: 387-396.

CHROMOSOMAL LOCATION

Genetic locus: SIVA1 (human) mapping to 14q32.33; Siva1 (mouse) mapping to 12 F1.

SOURCE

Siva (H-9) is a mouse monoclonal antibody raised against amino acids 1-175 representing full length Siva of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Siva (H-9) is available conjugated to agarose (sc-514375 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514375 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514375 PE), fluorescein (sc-514375 FITC), Alexa Fluor® 488 (sc-514375 AF488), Alexa Fluor® 546 (sc-514375 AF546), Alexa Fluor® 594 (sc-514375 AF594) or Alexa Fluor® 647 (sc-514375 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514375 AF680) or Alexa Fluor® 790 (sc-514375 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

Siva (H-9) is recommended for detection of Siva of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for Siva siRNA (h): sc-37385, Siva siRNA (m): sc-37386, Siva shRNA Plasmid (h): sc-37385-SH, Siva shRNA Plasmid (m): sc-37386-SH, Siva shRNA (h) Lentiviral Particles: sc-37385-V and Siva shRNA (m) Lentiviral Particles: sc-37386-V.

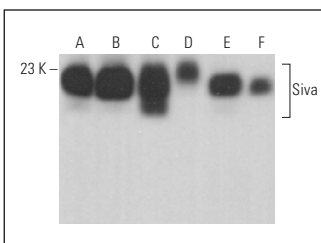
Molecular Weight of Siva: 19 kDa.

Positive Controls: ES-2 cell lysate: sc-24674, HeLa whole cell lysate: sc-2200 or Hs 181 Tes whole cell lysate: sc-364779.

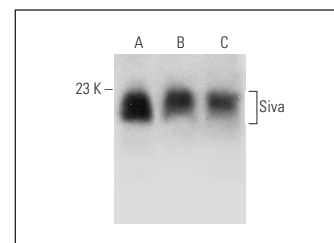
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Siva (H-9): sc-514375. Western blot analysis of Siva expression in HeLa (A), CCRF-CEM (B), MOLT-4 (C), PC-3 (D), NIH/3T3 (E) and F9 (F) whole cell lysates.



Siva (H-9): sc-514375. Western blot analysis of Siva expression in HeLa (A), Hs 181 Tes (B) and ES-2 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Palrasu, M., et al. 2020. Bacterial CagA protein compromises tumor suppressor mechanisms in gastric epithelial cells. *J. Clin. Invest.* 130: 2422-2434.
2. Palrasu, M., et al. 2022. *Helicobacter pylori* pathogen inhibits cellular responses to oncogenic stress and apoptosis. *PLoS Pathog.* 18: e1010628.

STORAGE

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