

TIA-1 (N-19): sc-34739

BACKGROUND

Fas, also referred to as CD95 or APO-1, is a type I transmembrane protein that plays a central role mediating viral immunity. TIA-1 and TIAR are two closely related proteins that possess three RRM (RNA recognition motifs), designated RRM 1, 2 and 3, respectively. Although both TIA-1 and TIAR are thought to function as mediators of apoptotic cell death, their specific roles in such pathways are unknown. Unlike TIA-1, which is found in the granules of cytotoxic lymphocytes, TIAR expression is limited to the nucleus and found in a much broader range of cells including, but not limited to, cells of hematopoietic origin. TIAR is translocated to the cytoplasm shortly after Fas ligation and this event immediately proceeds the onset of DNA fragmentation. A novel serine/threonine kinase that is activated as a result of Fas ligation, designated FAST (Fas-activated serine/threonine), shows kinase specificity towards both TIA-1 and TIAR. In unstimulated Jurkat cells, FAST resides in the cytoplasm as a highly phosphorylated protein and is quickly dephosphorylated and activated in response to stimulated Fas.

CHROMOSOMAL LOCATION

Genetic locus: TIA1 (human) mapping to 2p13.3, TIAL1 (human) mapping to 10q26.11; Tia1 (mouse) mapping to 6 D1, Tial1 (mouse) mapping to 7 F3.

SOURCE

TIA-1 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TIA-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34739 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TIA-1 (N-19) is recommended for detection of TIA-1 and, to a lesser extent, TIAR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

TIA-1 (N-19) is also recommended for detection of TIA-1 and, to a lesser extent, TIAR in additional species, including avian.

Molecular Weight of TIA-1: 40 kDa.

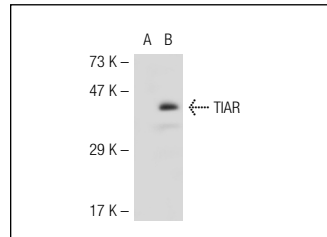
Molecular Weight of TIA-1 granule-associated isoform: 15 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, TIA-1 (h): 293 Lysate: sc-111880 or TIAR (m): 293T Lysate: sc-127656.

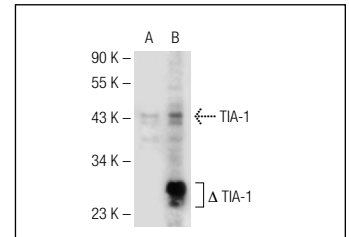
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TIA-1 (N-19): sc-34739. Western blot analysis of TIAR expression in non-transfected: sc-117752 (A) and mouse TIAR transfected: sc-127656 (B) 293T whole cell lysates.



TIA-1 (N-19): sc-34739. Western blot analysis of TIA-1 expression in non-transfected: sc-110760 (A) and human TIA-1 transfected: sc-111880 (B) 293 whole cell lysates.

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.


 MONOS
Satisfaction
Guaranteed

Try **TIA-1 (G-3): sc-166247** or **TIA-1 (C-10): sc-166246**, our highly recommended monoclonal alternatives to TIA-1 (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TIA-1 (G-3): sc-166247**.