SANTA CRUZ BIOTECHNOLOGY, INC.

FAST (K-16): sc-31145

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 RRMs (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: FASTK (human) mapping to 7q36.1; Fastk (mouse) mapping to 5 A3.

SOURCE

FAST (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FAST 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-31145 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAST (K-16) is recommended for detection of FAST kinase 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).

FAST (K-16) is also recommended for detection of FAST kinase in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for FAST siRNA (h): sc-35361, FAST siRNA (m): sc-35362, FAST shRNA Plasmid (h): sc-35361-SH, FAST shRNA Plasmid (m): sc-35362-SH, FAST shRNA (h) Lentiviral Particles: sc-35361-V and FAST shRNA (m) Lentiviral Particles: sc-35362-V.

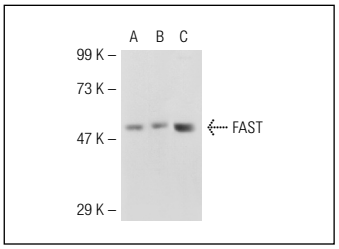
Molecular Weight of FAST: 56 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, FAST (m): 293T Lysate: sc-120197 or Mv 1 Lu cell lysate: sc-3810.

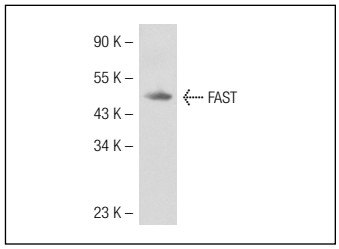
RECOMMENDED SECONDARY REAGENTS

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



FAST (K-16): sc-31145. Western blot analysis of FAST expression in non-transfected 293T: sc-117752 (**A**), mouse FAST transfected 293T: sc-120197 (**B**) and Jurkat (**C**) whole cell lysates.



FAST (K-16): sc-31145. Western blot analysis of FAST expression in Jurkat whole cell lysate.

STORAGE

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

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 **FAST (B-9): sc-365125**, our highly recommended monoclonal alternative to FAST (K-16).