**BACKGROUND**

Several serine/threonine protein kinases have been implicated as intermediates in signal transduction pathways. These include ERK/MAP kinases, ribosomal S6 kinase (Rsk) and Raf-1. Raf-1 is a protein with intrinsic kinase activity towards serine/threonine residues and that is widely expressed in many tissue types and cell lines. Rsk activation is dependent on the small molecular weight GTPase Ras, but the means by which this activation occurs is poorly understood. Two proteins putatively involved in this process are Ksr-1 and Tak1. Ksr-1 (kinase supressor of Ras) is a novel Raf-related protein kinase whose function is required for Ras signal transduction. Whether Ksr-1 lies directly downstream of Ras or acts in a parallel pathway is not yet known. Tak1 (TGFβ-activated kinase) has been shown to participate in the activation of the MAP kinase family in response to TGFβ stimulation.

**CHROMOSOMAL LOCATION**

Genetic locus: MAP3K7 (human) mapping to 6q15; Map3k7 (mouse) mapping to 4 A5.

**SOURCE**

Tak1 (C-9): sc-7967 is a mouse monoclonal antibody raised against amino acids 1-579 representing full length Tak1 (TGFβ-activated kinase) of mouse 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.

Tak1 (C-9) is available conjugated to agarose (sc-7967 AC), 500 µg/0.25 ml for research use only, not for use in diagnostic procedures. Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Tak1 (C-9) is recommended for detection of Tak1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:10000), 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 Tak1 siRNA (h): sc-36606, Tak1 siRNA (m): sc-36607, Tak1 shRNA Plasmid (h): sc-36606-SH, Tak1 shRNA Plasmid (m): sc-36607-SH, Tak1 shRNA (h) Lentiviral Particles: sc-36606-V and Tak1 shRNA (m) Lentiviral Particles: sc-36607-V.

Molecular Weight of Tak1: 70 kDa.

Positive Controls: Tak1 (h): 293 Lysate: sc-113194, 3611-RF whole cell lysate: sc-2215 or Tak1 (m): 293T Lysate: sc-126071.

**RESEARCH USE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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