**Tak1 (C-9): sc-7967**

**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. Raf-1 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 suppressor 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) 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 agarose in 1 ml, for IP; to HRP (sc-7967 HRP), 200 µg/ml, for WB; to Alexa Fluor® 488 (sc-7967 AF488), Alexa Fluor® 546 (sc-7967 AF546), Alexa Fluor® 594 (sc-7967 AF594) or Alexa Fluor® 647 (sc-7967 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7967 AF680) or Alexa Fluor® 790 (sc-7967 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**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 1:100-1:1000), 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 Tak1 siRNA (h): sc-36606, Tak1 siRNA (m): sc-36607, Tak1 siRNA (r): sc-155991, Tak1 shRNA Plasmid (h): sc-36608-SH, Tak1 shRNA Plasmid (m): sc-36607-SH, Tak1 shRNA Plasmid (r): sc-155991-SH, Tak1 shRNA (h) Lentiviral Particles: sc-36606-V, Tak1 shRNA (m) Lentiviral Particles: sc-36607-V and Tak1 shRNA (r) Lentiviral Particles: sc-155991-V.

Molecular Weight of Tak1: 70 kDa.

Positive Controls: Tak1 (h): 293 Lysate: sc-113194.

**DATA**

**STORAGE**

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

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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