SANTA CRUZ BIOTECHNOLOGY, INC.

Tak1 (m): 293T Lysate: sc-126071



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 sup-pressor 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 (TGF_β-activated kinase) has been shown to participate in the activation of the MAP kinase family in response to TGF β stimulation.

REFERENCES

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- 3. Morrison, D.K., Kaplan, D.R., Rapp, U. and Roberts, T.M. 1988. Signal transduction from membrane to cytoplasm: growth factors and membrane-bound oncogene products increase Raf-1 phosphorylation and associated protein kinase activity. Proc. Natl. Acad. Sci. USA 85: 8855-8859.
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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Map3k7 (mouse) mapping to 4 A5.

PRODUCT

Tak1 (m): 293T Lysate represents a lysate of mouse Tak1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Tak1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Tak1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Tak1 (C-9): sc-7967 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Tak1 expression in Tak1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG K BP-HRP: sc-516102 or m-IgG K 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.

DATA



Tak1 (C-9): sc-7967. Western blot analysis of Tak1 expression in non-transfected; sc-117752 (A) and mouse Tak1 transfected: sc-126071 (B) 293T whole cell lysates

RESEARCH USE

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