

Raf-B (F-3): sc-55522

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 cytoplasmic protein with intrinsic serine/threonine activity. It is broadly expressed in nearly all cell lines tested to date and is the cellular homolog of v-Raf, the product of the transforming gene of the 3,611 strain of murine sarcoma virus. The unregulated kinase activity of the v-Raf protein has been associated with transformation and mitogenesis, while the activity of Raf-1 is normally suppressed by a regulatory N-terminal domain. Raf-A, a second member of the Raf gene family of serine/threonine protein kinases, exhibits substantial homology to Raf-1 within the kinase domain of the two molecules, but less homology elsewhere. Expression of Raf-B is highly restricted, with highest levels in the cerebrum and testis.

CHROMOSOMAL LOCATION

Genetic locus: BRAF (human) mapping to 7q34; Braf (mouse) mapping to 6 B1.

SOURCE

Raf-B (F-3) is a mouse monoclonal antibody raised against amino acids 12-156 mapping at the N-terminus of Raf-B of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Raf-B (F-3) is available conjugated to agarose (sc-55522 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-55522 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-55522 PE), fluorescein (sc-55522 FITC), Alexa Fluor® 488 (sc-55522 AF488), Alexa Fluor® 546 (sc-55522 AF546), Alexa Fluor® 594 (sc-55522 AF594) or Alexa Fluor® 647 (sc-55522 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-55522 AF680) or Alexa Fluor® 790 (sc-55522 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Raf-B (F-3) is recommended for detection of Raf-B of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 Raf-B siRNA (h): sc-36368, Raf-B siRNA (m): sc-63294, Raf-B siRNA (r): sc-61894, Raf-B shRNA Plasmid (h): sc-36368-SH, Raf-B shRNA Plasmid (m): sc-63294-SH, Raf-B shRNA Plasmid (r): sc-61894-SH, Raf-B shRNA (h) Lentiviral Particles: sc-36368-V, Raf-B shRNA (m) Lentiviral Particles: sc-63294-V and Raf-B shRNA (r) Lentiviral Particles: sc-61894-V.

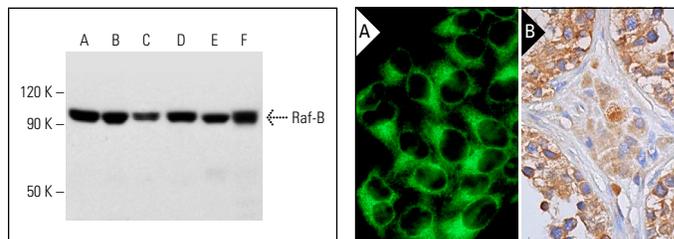
Molecular Weight of Raf-B isoforms: 95/62 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, THP-1 cell lysate: sc-2238 or HL-60 whole cell lysate: sc-2209.

STORAGE

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

DATA



Raf-B (F-3): sc-55522. Western blot analysis of Raf-B expression in A-431 (A), CCRF-CEM (B), HL-60 (C), THP-1 (D), Hep G2 (E) and NIH/3T3 (F) whole cell lysates.

Raf-B (F-3): sc-55522. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells (B).

SELECT PRODUCT CITATIONS

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- Schroyer, A.L., et al. 2018. MLK3 phosphorylation by ERK1/2 is required for oxidative stress-induced invasion of colorectal cancer cells. *Oncogene* 37: 1031-1040.
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RESEARCH USE

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

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