SANTA CRUZ BIOTECHNOLOGY, INC.

A-Raf (C-20): sc-408



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 3611 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-A is found at highest levels in urogenital tissues and kidney and at lowest level in brain tissue.

CHROMOSOMAL LOCATION

Genetic locus: ARAF (human) mapping to Xp11.23; Araf (mouse) mapping to X A1.3.

SOURCE

A-Raf (C-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of A-Raf of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-408 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-408 AC, 500 $\mu g/0.25$ ml agarose in 1 ml.

APPLICATIONS

A-Raf (C-20) is recommended for detection of A-Raf p68 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

A-Raf (C-20) is also recommended for detection of A-Raf p68 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for A-Raf siRNA (h): sc-29615, A-Raf siRNA (m): sc-29616, A-Raf shRNA Plasmid (h): sc-29615-SH, A-Raf shRNA Plasmid (m): sc-29616-SH, A-Raf shRNA (h) Lentiviral Particles: sc-29615-V and A-Raf shRNA (m) Lentiviral Particles: sc-29616-V.

Molecular Weight of A-Raf: 68 kDa.

RESEARCH USE

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

STORAGE

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

DATA





A-Raf (C-20): sc-408. Western blot analysis of A-Raf expression in K-562 whole cell lysate.

A-Raf (C-20): sc-408. Western blot analysis of A-Raf expression in non-transfected: sc-117752 (A) and human A-Raf transfected: sc-158202 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Foncea, R., et al. 1997. Insulin like growth factor-1 rapidly activates multiple signal transduction pathways in cultured rat cardiac myocytes. J. Biol. Chem. 272: 19115-19124.
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- Kaplan, F.M., et al. 2010. Hyperactivation of MEK-ERK1/2 signaling and resistance to apoptosis induced by the oncogenic B-RAF inhibitor, PLX4720, in mutant N-RAS melanoma cells. Oncogene 30: 366-371.
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- Röring, M., et al. 2012. Distinct requirement for an intact dimer interface in wild-type, V600E and kinase-dead B-Raf signalling. EMBO J. 31: 2629-2647.

MONOS Satisfation Guaranteed Try **A-Raf (A-5): sc-166771** or **A-Raf (1): sc-135820**, our highly recommended monoclonal alternatives to A-Raf (C-20).