

A-Raf (N-terminal region)

Cat. # RM2891

Host Mouse Monoclonal IgG1

Size 100 µl

Background:

The Ras-Raf-MAP kinase signaling pathway is involved in control of cell proliferation and differentiation. The Raf kinase family includes A-Raf, B-Raf, and C-Raf. Each family member has three highly conserved regions (CR1-3). The N-terminal CR1 contains the Ras-GTP-binding domain. The CR2 contains a negative regulatory serine residue (C-Raf (S259)/B-Raf (S365)) that may bind 14-3-3 proteins. The CR3 is the catalytic domain that contains phosphorylation sites for Raf-regulating enzymes within two segments, the N-region and the activation segment. Activation of C-Raf involves phosphorylation at many sites including Ser-338, Tyr-341, and Ser-471. The latter site is phosphorylated after EGF stimulation and may be important for MEK interaction in both C-Raf and A-Raf. In B-Raf, multiple phosphorylation sites have been identified, but their specific roles are uncertain. Phosphorylation of Ser-446 may prime B-Raf for activation, and Ser-446 and/or Ser-447 phosphorylation may be critical for B-Raf biological activity during PC12 differentiation. Ser-579 is required for growth factor activation and kinase activity.

References

Mason, C.S. et al. (1999) EMBOJ 18(8):2137.

Baljuls, A. et al. (2008) J Biol Chem 283(40):27239.

Immunogen:

Clone (M289) was generated from a sequence corresponding to amino acids in the N-terminal region of human A-Raf. This A-Raf sequence has high homology to rat and mouse A-Raf.

Applications:

WB 1:1000

ELISA 1:2000

End user should determine optimal dilution for their particular applications and experiments. Western blot membranes were incubated with diluted antibody in 5% non-fat milk, PBS, 0.04% Tween20 for 1 hour at room temperature.

Related Products:

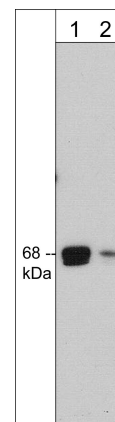
RP2901 C-Raf (Ser-471), phospho-specific

RM2081 C-Raf (N-terminal region) Mouse Monoclonal

RP2031 B-Raf (Ser-446), phospho-specific

RP2011 B-Raf (N-terminus) Rabbit Polyclonal

RP2071 C-Raf (C-terminus) Rabbit Polyclonal



Western blot of human Jurkat cell lysate. The blot was probed with mouse monoclonal anti-A-Raf (N-terminal region) antibody at 1:500 (lane 1) and 1:2000 (lane 2).

Buffer and Storage:

Mouse monoclonal, protein G purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Do not aliquot. Stable for 1 year.

Specificity:

This antibody detects a 68 kDa* protein corresponding to the molecular mass of A-Raf on SDS-PAGE immunoblots of human SKN-SH and Jurkat cells.

*All molecular weights (MW) are confirmed by comparison to Bio-Rad Rainbow Markers and to western blot mobilities of known proteins with similar MW.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

www.ecmbiosciences.com
telephone: 859-879-2075
toll-free: 1-800-859-8202
email: info@ecmbiosciences.com

ECMBiosciences

Rev 2/22/2009