

C-Raf (N-terminal region)

Cat. # RM2081

Host Mouse Monoclonal IgG1

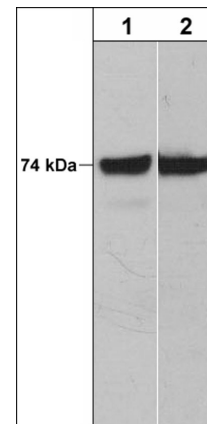
Size 100 µl

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 multiple catalytic domain sites. EGF receptor activation leads to phosphorylation of Ser-471, which is critical for C-Raf kinase activity and is required for interaction with MEK. In B-Raf, the corresponding conserved site is Ser-578, and mutation of this residue to alanine produces an inactivate kinase. Thus, this Raf phosphorylation site may be critical for kinase activity and may be important for MEK binding and activation.

References

Mason, C.S. et al. (1999) EMBOJ 18(8):2137.
Zhu, J. et al. (2005). Mol. Biol. Cell 16:4733.



Western blot of human A431 (lane 1) and Jurkat (lane 2) cells probed with mouse monoclonal anti-C-Raf (N-terminal) antibody at 1:500.

Immunogen:

Clone (M208) was generated from a sequence corresponding to amino acids in the N-terminal region of human C-Raf. This C-Raf sequence has high homology to rat and mouse C-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:

RP2011 B-Raf (N-terminus) Rabbit Polyclonal
RP2031 B-Raf (Ser-446), phospho-specific
RP2071 C-Raf (C-terminus) Rabbit Polyclonal

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 74 kDa* protein corresponding to the molecular mass of C-Raf on SDS-PAGE immunoblots of human A431 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
tech: info@ecmbiosciences.com

ECMBiosciences

Rev 4/14/2008