

Raf Phospho-Regulation Antibody Sampler Kit

Catalog # RK6080

Kit Components:

Catalog#	Description	Host	Size	Applications	Species Reactivity	MW (kDa)
RM2891	A-Raf (N-terminal region)	Mouse mAb	50 μ l	WB, E	H, R, M	68
RP2011	B-Raf (N-terminus)	Rabbit pAb	50 μ l	WB, E	H, R, M	95
RP2031	B-Raf (Ser-446), phospho-specific [Conserved site]	Rabbit pAb	50 μ l	WB, E	H, R, M	95
RM2081	C-Raf (N-terminal region)	Mouse mAb	50 μ l	WB, E	H, R, M	74
RP2071	C-Raf (C-terminus)	Rabbit pAb	50 μ l	WB, E	H, R, M	74
RP2901	C-Raf (Ser-471), phospho-specific [Conserved site]	Rabbit pAb	50 μ l	WB, E	H, R, M	74

Applications: WB = western blot, E = ELISA. Species: H = Human, R = Rat, M = Mouse

Kit Summary:

The Raf phospho-regulation antibody sampler kit can be used to examine phosphorylation of A-Raf, B-Raf, and C-Raf. The anti-B-Raf (Ser-446) detects site-specific phosphorylation of B-Raf, as well as the conserved site in C-Raf (Ser-338) and A-Raf (Ser-299). Similarly, the anti-C-Raf (Ser-471) detects site-specific phosphorylation in C-Raf, as well as in B-Raf (Ser-579) and A-Raf (Ser-432). The kit also includes antibodies to monitor total expression levels of A-Raf, B-Raf, and C-Raf.

Buffers and Storage:

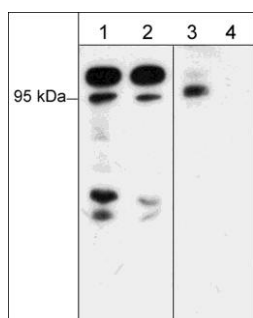
Mouse monoclonal and rabbit polyclonal antibodies are supplied in 50 μ l phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C . Do not aliquot. Stable for 1 year.

Background:

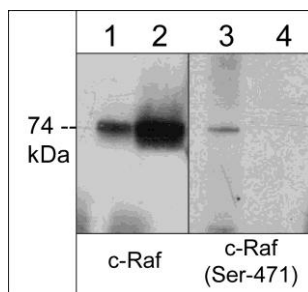
The Ras-Raf-MAP kinase signaling pathway is involved in control of cell proliferation and differentiation. The Raf kinase family includes A-Raf, B-Raf, and C-Raf. Each family member has three highly conserved regions (CR1-3). The N-terminal CR1 contains the Ras-GTP-binding domain. The CR2 contains a 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 in B-Raf is required for growth factor activation and kinase activity.

References:

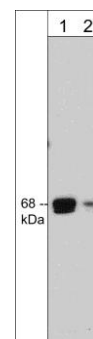
- Mason, C.S. et al. (1999) EMBOJ 18(8):2137.
 Baljuls, A. et al. (2008) J Biol Chem 283(40):27239.
 Zhu et al. (2005) Mol. Biol. Cell 16:4733.
 Karbowiczek, M. et al. (2006) J Biol Chem 281(35):25447.
 Brummer, T. et al. (2006) Oncogene 25(47):6262.
 Wilhelm, S.M. et al. (2004) Cancer Res 64:7099.



Western blot of human Jurkat cells treated with calyculin A (100 nM) for 30 min. The blots were untreated (lanes 1 & 3) or treated (lanes 2 & 4) with lambda phosphatase and probed with anti-B-Raf (N-terminus) (lanes 1 & 2) or anti-B-Raf (Ser-446) (lanes 3 & 4).



Western blot of human Jurkat cells treated with calyculin A (100 nM) for 30 min. The blots were untreated (lanes 1 & 3) or treated (lanes 2 & 4) with lambda phosphatase and probed with anti-C-Raf (N-terminal region) (lanes 1 & 2) or anti-C-Raf (Ser-471) (lanes 3 & 4).



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).

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