

# C-Raf (C-terminus) peptide

Cat. # RX2075

Size 50 µg

## **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.

## **Peptide Sequence:**

C-Raf (C-terminus) synthetic peptide corresponding to amino acids 637 to 648 in human C-Raf. This sequence is conserved in C-Rafs from many species, and is not found in A-Raf or B-Raf.

## **Applications:**

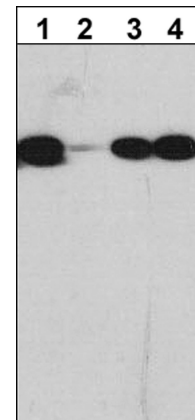
Blocking 1:1000

ELISA 50 ng/well

End user should determine optimal concentration dependent on the concentration of the antibody.  
Recommended for blocking antibody reactivity in Western blot and immunocytochemistry.  
ELISA established in 96-well Nunc immunoplates where peptide was bound to plates for 2 hrs in 0.1 M sodium carbonate buffer, pH 8.5.

## **Related Products:**

RP2011 B-Raf (N-terminus) Rabbit Polyclonal  
RP2031 B-Raf (Ser-446), phospho-specific  
RP2071 C-Raf (C-terminus) Rabbit Polyclonal  
RM2081 C-Raf (N-terminal region) Mouse Monoclonal



Western blot of GST fusion protein containing human C-Raf. The blot was probed with polyclonal anti-C-Raf (C-terminus) antibody in the presence (lanes 2-4) or absence (lane 1) of C-Raf (C-terminus) blocking peptide (lane 2), C-Raf (Ser-471) peptide (lane 3), or an unrelated peptide (lane 4).

## **Buffer and Storage:**

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.

Store at -20°C. Stable for 1 year.

## **Specificity:**

The peptide is specifically recognized by anti-C-Raf (C-terminus) antibody (RP2071) in ELISA, and has been shown to block the reactivity of RP2071 during Western blot. In addition, the peptide is recommended for use in blocking RP2071 reactivity in immunocytochemistry.

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