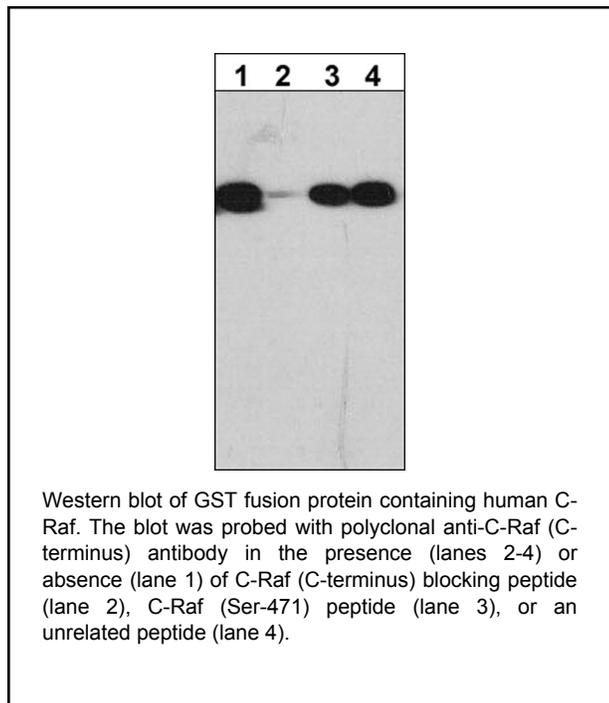


Background

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.

Background References

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



Applications

Blocking 1:1000
ELISA 50 ng/well

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.

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.

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

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.

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.

Related Products

RP2011 B-Raf (N-terminus) Rabbit Polyclonal
RP2031 B-Raf (S446)/C-Raf (S338)/A-Raf (S299), phospho-specific Rabbit
RP2071 C-Raf (C-terminus) Rabbit Polyclonal
RM2081 C-Raf (N-terminal region) Mouse Monoclonal

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