Raf-1 (S621) polyclonal antibody

Catalog: BCP01412

Host: Rabbit

Reactivity: Human, Mouse

BackGround:

A-Raf, B-Raf, and c-Raf (Raf-1) are the main effectors recruited by GTP-bound Ras to activate the MEK-MAP kinase pathway. Activation of c-Raf is the best understood and involves phosphorylation at multiple activating sites, including Ser338, Tyr341, Thr491, Ser494, Ser497, and Ser499. p21-activated kinase (PAK) has been shown to phosphorylate c-Raf at Ser338, and the Src family phosphorylates Tyr341 to induce c-Raf activity. Ser338 of c-Raf corresponds to similar sites in A-Raf (Ser299) and B-Raf (Ser445), although this site is constitutively phosphorylated in B-Raf. Inhibitory 14-3-3 binding sites on c-Raf (Ser259 and Ser621) can be phosphorylated by Akt and AMPK, respectively. While A-Raf, B-Raf, and c-Raf are similar in sequence and function, differential regulation has been observed. Of particular interest, B-Raf contains three consensus Akt phosphorylation sites (Ser364, Ser428, and Thr439) and lacks a site equivalent to Tyr341 of c-Raf. Research studies have shown that the B-Raf mutation V600E results in elevated kinase activity and is commonly found in malignant melanoma. Six residues of c-Raf (Ser29, Ser43, Ser289, Ser296, Ser301, and Ser642) become hyperphosphorylated in a manner consistent with c-Raf inactivation. The hyperphosphorylation of these six sites is dependent on downstream MEK signaling and renders c-Raf unresponsive to subsequent activation events.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

Molecular Weight:

~ 75 kDa

Swiss-Prot:

P04049

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:1000~1:2000

Storage&Stability:

Store at $4 \,^{\circ}{\rm C}$ short term. Aliquot and store at $-20 \,^{\circ}{\rm C}$ long term. Avoid freeze-thaw cycles.

Specificity:

Raf-1 (S621) polyclonal antibody detects endogenous levels of Raf-1 protein.

DATA:



Western blot (WB) analysis of Raf-1 (S621) polyclonal antibody at 1:1000 dilution

Lane1:CT-26 whole cell lysate(30ug)

Lane2:EC9706 whole cell lysate(30ug)

Lane3:SGC7901 whole cell lysate(30ug)

Note:

For research use only, not for use in diagnostic procedure.