

# Raf-1 (Y341) polyclonal antibody

Catalog: BCP01413 Host: Rabbit Reactivity: Human

#### **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 protein 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:**

~ 85 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:

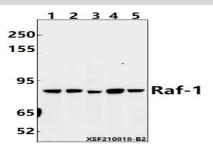
# IF: 1:50~1:200

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

## **Specificity:**

Raf-1 (Y341) polyclonal antibody detects endogenous levels of Raf-1 protein.

## **DATA:**



Western blot (WB) analysis of Raf-1 (Y341) polyclonal antibody at 1:500 dilution

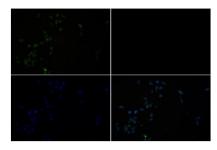
Lane1:HepG2 whole cell lysate(40ug)

Lane2:EC9706 whole cell lysate(40ug)

Lane3:HEK293T whole cell lysate(40ug)

Lane4:SGC7901 whole cell lysate(40ug)

Lane5:HCT116 whole cell lysate(40ug)



Immunofluorescence analysis of HepG2 cells using Raf-1 antibody at dilution of 1:50.

## Note:

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

Complex biotech, co. Ltd.



