

## **Product datasheet for TA392575**

# **RAF1 Rabbit Polyclonal Antibody**

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: IF, WB

**Recommended Dilution:** WB: 1:1000~1:2000 IF: 1:50~1:200

Reactivity: Human

Host: Rabbit

Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to Human Raf-1.

**Specificity:** Raf-1 (Y341) polyclonal antibody detects endogenous levels of Raf-1 protein. **Formulation:** Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

Concentration: 1mg/ml

Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Stability: 1 year

Predicted Protein Size: ~ 85 kDa

**Gene Name:** Raf-1 proto-oncogene, serine/threonine kinase

**Database Link:** Entrez Gene 5894 Human

P04049



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#### Background:

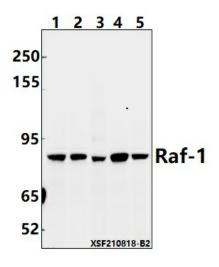
A-Raf, B-Raf, and c-Raf (Raf-1) are the main effectors recruited by GTP-bound Ras to activate the MEK-MAP kinase pathway. Activation of c-Raf is the best understood and involves phosphorylation at multiple activating sites including Ser338, Tyr341, Thr491, Ser494, Ser497, and Ser499. p21-activated protein 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.

Synonyms: cRaf; Proto-oncogene c-RAF; RAF; RAF1; RAF1; RAF proto-oncogene serine/threonine-protein

kinase

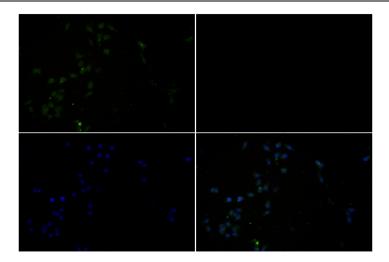
**Note:** For research use only, not for use in diagnostic procedure.

### **Product images:**



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.