

## PRODUCT DATA SHEET

Bioworld Technology,Inc.

# Raf-1 (Phospho-Ser621) polyclonal antibody

Catalog: AP0550 Host: Rabbit Reactivity: Human, Rat, 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

IF: 1:50~1:200 IP: 1:50~1:200

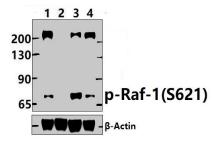
#### **Storage&Stability:**

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

#### **Specificity:**

Raf-1 (Phospho-Ser621) polyclonal antibody detects endogenous levels of Raf-1 protein only when phosphorylated at Ser621.

#### DATA:



Western blot (WB) analysis of Raf-1 (Phospho-Ser621) polyclonal an-

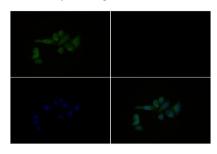
tibody at 1:1000 dilution

Lane1:Hela whole cell lysate(30ug)

Lane2:Hela treated with  $\lambda$ -phosphatase whole cell lysate(30ug)

Lane3:CT-26 whole cell lysate(30ug)

Lane4:PC12 whole cell lysate(30ug)



Immunofluorescence analysis of EC9706 cells using Raf-1 (Phospho-Ser621) pAb at dilution of 1:200 (40x lens).

#### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841

## Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

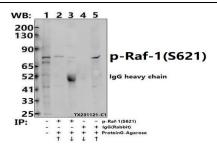
P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151



# PRODUCT DATA SHEET

Bioworld Technology,Inc.



Immunoprecipitation of HEK293T cell lysates using Raf-1 (Phospho-Ser621) pAb (Sepharose Bead Conjugate)#BD0048 (lane 2 and lane 3) and Nonspecific IgG Control (Sepharose Bead Conjugate)#BD0048 (lane 4 and lane 5) .Lane 1 is 30% input. The western blot was probed using Raf-1 (Phospho-Ser621) pAb.

#### Note:

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

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>
6123263284

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151