

Basic Information

Product Name	Anti-RAF1 Antibody
Gene Name	RAF1
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E. coli-derived human Raf1 recombinant protein (Position: Y364-Q451). Human Raf1 shares 98.9% amino acid (aa) sequence identity with both mouse and rat Raf1.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	73 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

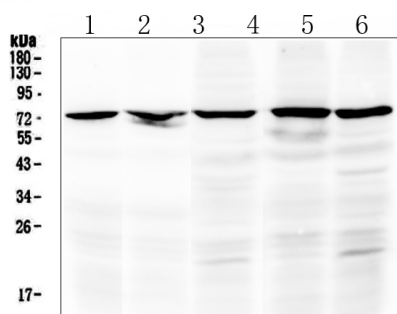
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

RAF proto-oncogene serine/threonine-protein kinase, also known as proto-oncogene c-RAF or simply c-Raf or even Raf-1, is an enzyme that in humans is encoded by the RAF1 gene. This gene is the cellular homolog of viral raf gene (v-raf). The encoded protein is a MAP kinase kinasekinase (MAP3K), which functions downstream of the Ras family of membrane associated GTPases to which it binds directly. Once activated, the cellular RAF1 protein can phosphorylate to activate the dual specificity protein kinases MEK1 and MEK2, which in turn phosphorylate to activate the serine/threonine specific protein kinases, ERK1 and ERK2. Activated ERKs are pleiotropic effectors of cell physiology and play an important role in the control of gene expression involved in the cell division cycle, apoptosis, cell differentiation and cell migration. Mutations in this gene are associated with Noonan syndrome 5 and LEOPARD syndrome 2.

Selected Validation Data



Western blot analysis of RAF1 using anti-RAF1 antibody (A00446-1).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat kidney tissue lysates,

Lane 2: mouse kidney tissue lysates,

Lane 3: human MCF-7 whole cell lysates,

Lane 4: human 22RV1 whole cell lysates,

Lane 5: human Hela whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-RAF1 antigen

affinity purified polyclonal antibody (A00446-1) at a dilution of

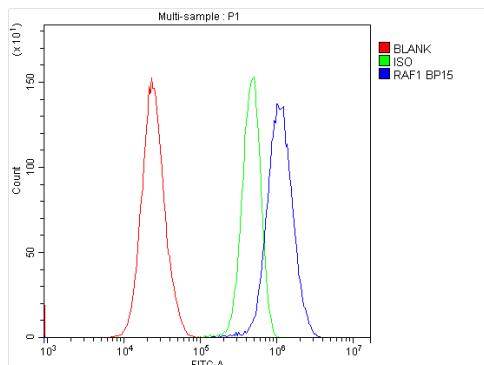
1:1000 and probed with a goat anti-rabbit IgG-HRP secondary

antibody (Catalog # BA1054). The signal is developed using ECL Plus

Western Blotting Substrate (Catalog # AR1197). A specific band was

detected for RAF1 at approximately 73 kDa. The expected band size

for RAF1 is at 73 kDa.



Flow Cytometry analysis of Hela cells using anti-RAF1 antibody (A00446-1).

Overlay histogram showing Hela cells stained with A00446-1 (Blue

line). To facilitate intracellular staining, cells were fixed with 4%

paraformaldehyde and permeabilized with permeabilization buffer.

The cells were blocked with 10% normal goat serum. And then

incubated with rabbit anti-RAF1 Antibody (A00446-1) at 1:100

dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit

IgG (BA1127) was used as secondary antibody at 1:100 dilution for

30 minutes at 20°C. Isotype control antibody (Green line) was rabbit

IgG at 1:100 dilution used under the same conditions. Unlabelled

sample without incubation with primary antibody and secondary

antibody (Red line) was used as a blank control.