**BACKGROUND**

Several serine/threonine protein kinases have been implicated as intermediates in signal transduction pathways. These include ERK/MAP kinases, ribosomal S6 kinase (Rsk) and Raf-1. Raf-1 is a cytoplasmic protein with intrinsic serine/threonine activity. It is broadly expressed in nearly all cell lines tested to date and is the cellular homolog of v-Raf, the product of the transforming gene of the 3611 strain of murine sarcoma virus. The unregulated kinase activity of the v-Raf protein has been associated with transformation and mitogenesis while the activity of Raf-1 is normally suppressed by a regulatory N-terminal domain. Raf-1 is activated in response to activation of a variety of tyrosine kinase receptors as well as in response to pp60v-Src expression. There is accumulating evidence that Ras p21 may play a role in activation of Raf-1 and may even play the role of the messenger from membrane tyrosine kinases to Raf-1.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: RAF1 (human) mapping to 3p25.2; Raf1 (mouse) mapping to 17q21.3-22.

**APPLICATIONS**

Raf-1 (E-10) is recommended for detection of Raf-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Raf-1 (E-10) is also recommended for detection of Raf-1 in additional species, including equine, canine and bovine.


Molecular Weight of Raf-1: 80 kDa.

**SOURCE**

Raf-1 (E-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 625-648 at the C-terminus of Raf-1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Raf-1 (E-10) is available conjugated to agarose (sc-7267 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-7267 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycocyanin (sc-7267 PE), fluorescein (sc-7267 FITC), Alexa Fluor® 488 (sc-7267 AF488), Alexa Fluor® 546 (sc-7267 AF546), Alexa Fluor® 594 (sc-7267 AF594) or Alexa Fluor® 647 (sc-7267 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-7267 AF680) or Alexa Fluor® 790 (sc-7267 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-7267 P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.