**BACKGROUND**

p-Raf-1 (Ser 338): sc-12358

- Raf-1 is a ubiquitously expressed cytoplasmic protein with intrinsic serine/threonine kinase activity. Raf-1, or c-Raf, 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 is associated with cellular transformation and mitogenesis. Raf-1 is normally suppressed by its regulatory N-terminal domain. Raf-1 is activated in response to a variety of tyrosine kinase receptors as well as in response to pp60v-Src expression. Specifically, Raf-1 is phosphorylated in the catalytic domain at Ser 338 and, to a lesser extent, Ser 339. This phosphorylation requires the co-activation of PI 3-kinase and the Ras signaling pathway. Raf-1 is also phosphorylated on Tyr 340 and 341, which induces the phosphorylation of MEK. Phosphorylation of Ser 621 is essential for the catalytic activity of Raf-1 and downregulation by c-AMP-dependent protein kinase A (PKA). PKA also phosphorylates Raf-1 on Tyr 340 and 341, which induces the phosphorylation of MEK. Phosphorylation of Ser 621 is essential for the catalytic activity of Raf-1 and downregulation by c-AMP-dependent protein kinase A (PKA).

**CHROMOSOMAL LOCATION**

- Genetic locus: RAF1 (human) mapping to 3p25.2; Raf1 (mouse) mapping to 6E3.

**SOURCE**

- p-Raf-1 (Ser 338) is available as either goat (sc-12358) or rabbit (sc-12358-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing Ser-338 phosphorylated Raf-1 of human origin.

**PRODUCT**

- Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
- Blocking peptide available for competition studies, sc-12358 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

- p-Raf-1 (Ser 338) is recommended for detection of Ser 338 phosphorylated 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).
- p-Raf-1 (Ser 338) is also recommended for detection of correspondingly phosphorylated Raf-1 in additional species, including equine, canine, bovine and avian.

**STORAGE**

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

**DATA**

- p-Raf-1 (Ser 338)-R: sc-12358-R. Western blot analysis of Raf-1 phosphorylation in untreated (A) and UV-irradiated (B) HeLa cultures.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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