

Phospho-Ser301 Raf-1 Antibody
Affinity purified rabbit polyclonal antibody
Catalog # AN1084

Specification

Phospho-Ser301 Raf-1 Antibody - Product Information

Application	WB
Primary Accession	P11345
Reactivity	Human, Rat
Predicted	Bovine, Chicken, Mouse, Monkey, Xenopus
Host	Rabbit
Clonality	polyclonal
Calculated MW	74 KDa

Phospho-Ser301 Raf-1 Antibody - Additional Information

Gene ID	24703
Gene Name	RAF1
Other Names	
RAF proto-oncogene serine/threonine-protein kinase, Proto-oncogene c-RAF, cRaf, Raf-1, Raf1, Raf	

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser301 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and non-phosphopeptide affinity columns.

Antibody Specificity

Specific for the ~74k Raf-1 protein phosphorylated at Ser301. Immunolabeling of the Raf-1 protein band is blocked by λ -phosphatase treatment.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Ser301 Raf-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

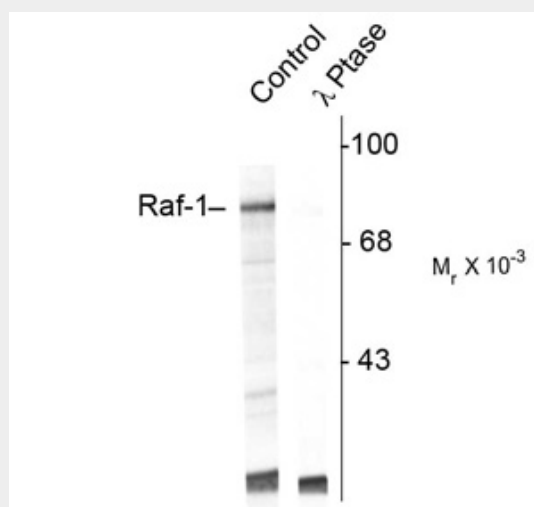
Blue Ice

Phospho-Ser301 Raf-1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-Ser301 Raf-1 Antibody - Images



Western blot of UV treated human Jurkat cell lysate showing specific immunolabeling of the ~74k Raf-1 protein (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase: λ-Ptase). The blot is identical to the control except that it was incubated in λ-Ptase (1200 units for 30 min) before being exposed to the phospho Ser301 Raf-1 antibody. The immunolabeling of Raf-1 is completely eliminated by treatment with λ-Ptase.

Phospho-Ser301 Raf-1 Antibody - Background

The Ras pathway is a critical signal transduction cascade involved in regulating cellular proliferation, differentiation, survival, and oncogenic transformation. Members of the Raf serine/threonine kinase family are key intermediates in this cascade, functioning to relay signals from activated Ras to the downstream protein kinases MEK and ERK (Marshall, 1996). Previous studies have shown that phosphorylation is required for Raf-1 activation (Dhillon and Kolch, 2002; Chong et al., 2003). Recent work has demonstrated that phosphorylation also regulates the downregulation of Raf (Dougherty et al., 2005) with two sites participating: Ser301 and Ser642.

Phospho-Ser301 Raf-1 Antibody - References

Chong H, Vikis HG, Guan KL (2003) Mechanisms of regulating the Raf kinase family. Cellular Signalling 15:463-469.

Dhillon AS, Kolch W (2002) Untying the regulation of the Raf-1 kinase. Arch Biochem Biophys 404:3-9.

Dougherty MK, Muller J, Ritt DA, Zhou M, Zhou XZ, Copeland TD, Conrads TP, Veenstra TD, Lu KP, Morrison DK

(2005) Regulation of Raf-1 by Direct Feed back Phosphorylation. Mol Cell 17:215-224.

Marshall CJ (1996) Ras effectors. current opinion in cell biology 8:197-204.