

## Raf1 Antibody

Catalog No: #21566

Package Size: #21566-1 50ul #21566-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

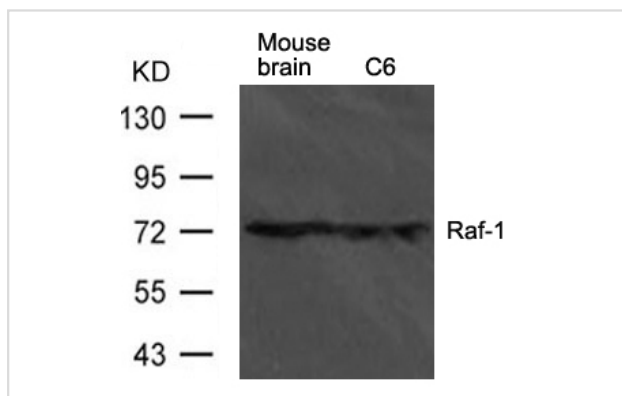
Product Name	Raf1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total Raf-1 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa. 641-645(T-S-P-R-L ) derived from Rat Raf-1.
Target Name	Raf1
Other Names	c-RAF; RAF proto-oncogene serine/threonine-protein kinase;
Accession No.	Swiss-Prot: P11345NCBI Protein: NP_036771.1
Uniprot	P11345
GeneID	24703;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

Predicted MW: 74kd

Western blotting: 1:500~1:1000

## Images



Western blot analysis of extract from mouse brain tissue and C6 cells using Raf-1 Antibody #21566

## 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 (1). Activation of c-Raf is the best understood and involves phosphorylation at multiple activating sites including Ser338, Tyr341, Thr491, Ser494, Ser497 and Ser499 (2). p21-activated protein kinase (PAK) has been shown to phosphorylate c-Raf at Ser338 and the Src family phosphorylates Tyr341 to induce c-Raf activity (3,4). 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 (5). Inhibitory 14-3-3 binding sites on c-Raf (Ser259 and Ser621) can be phosphorylated by Akt and AMPK, respectively (6,7). While A-Raf, B-Raf and c-Raf are similar in sequence and function, differential regulation has been observed (8). 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 (8,9). The B-Raf mutation V600E results in elevated kinase activity and is commonly found in malignant melanoma (10). 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

Avruch, J. et al. (1994) *Trends Biochem. Sci.* 19, 279-283.

Chong, H. et al. (2001) *EMBO J.* 20, 3716-3727.

King, A.J. et al. (1998) *Nature* 396, 180-183.

Fabian, J.R. et al. (1993) *Mol. Cell Biol.* 13, 7170-7179.

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Note: This product is for in vitro research use only