

Rabbit RAF1 Polyclonal Antibody | anti-RAF1 antibody

RAF1 Antibody

CATALOG # AAA169939	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunofluorescence, Western Blot
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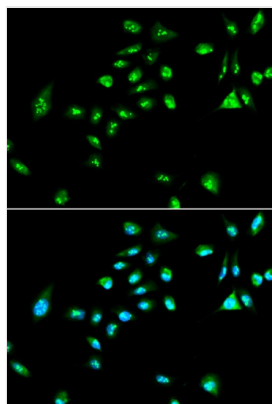
PRODUCT SYNONYMS

RAF1; Polyclonal Antibody; RAF1 Antibody; CRAF; NS5; Raf-1; c-Raf; anti-RAF1 antibody

PRODUCT SPECIFICATIONS

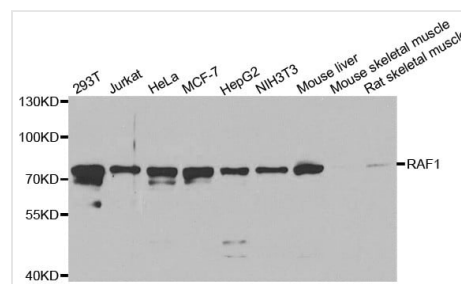
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Antigen affinity purification
Concentration	1mg/mL (varies by lot)
Sequence Length	421
Applicable Applications for anti-RAF1 antibody	IF (Immunofluorescence), WB (Western Blot)
Immunogen	C term -peptide of human RAF1
Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-227 / sc-133 / sc-7198
Preparation and Storage	Store at -20 degree C (regular) and -80 degree C (long term). Avoid freeze / thaw cycles.

IMAGES



IF (Immunofluorescence)

Immunofluorescence analysis of A549 cell using RAF1 antibody. Blue: DAPI for nuclear staining.



WB (Western Blot)

Western blot analysis of extracts of mouse brain and mouse heart tissue, using RAF1 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-RAF1 antibody	A-Raf, B-Raf and RAF1 (Raf-1) are the main effectors recruited by GTP-bound Ras to activate the MEK-MAP kinase pathway (1). Activation of RAF1 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 RAF1 at Ser338 and the Src family phosphorylates Tyr341 to induce RAF1 activity (3, 4). Ser338 of RAF1 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 RAF1 (Ser259 and Ser621) can be phosphorylated by Akt and AMPK, respectively (6, 7). While A-Raf, B-Raf and RAF1 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 RAF1 (8, 9). The B-Raf mutation V600E results in elevated kinase activity and is commonly found in malignant melanoma (10). Six residues of RAF1 (Ser29, Ser43, Ser289, Ser296, Ser301 and Ser642) become hyperphosphorylated in a manner consistent with RAF1 inactivation. The hyperphosphorylation of these six sites is dependent on downstream MEK signaling and renders RAF1 unresponsive to subsequent activation events (11).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	496091
NCBI GeneID	5894
Molecular Weight	75,395 Da
NCBI Official Full Name	RAF1, partial
NCBI Official Synonym Full Names	Raf-1 proto-oncogene, serine/threonine kinase
NCBI Official Symbol	RAF1
NCBI Official Synonym Symbols	NS5; CRAF; Raf-1; c-Raf; CMD1NN
NCBI Protein Information	RAF proto-oncogene serine/threonine-protein kinase; C-Raf proto-oncogene, serine/threonine kinase; Oncogene RAF1; proto-oncogene c-RAF; raf proto-oncogene serine/threonine protein kinase; v-raf-1 murine leukemia viral oncogene homolog 1
UniProt Protein Name	RAF proto-oncogene serine/threonine-protein kinase
UniProt Gene Name	RAF1
UniProt Synonym Gene Names	RAF; cRaf
UniProt Entry Name	RAF1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.