

# Datasheet for ABIN7564914 **RAF1 Protein (AA 1-648) (His tag)**



#### Go to Product page

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Quantity:	1 mg
Target:	RAF1
Protein Characteristics:	AA 1-648
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RAF1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## **Product Details**

Purpose:	Custom-made recombinat Raf1 Protein expressed in mammalien cells.
Sequence:	MEHIQGAWKT ISNGFGLKDA VFDGSSCISP TIVQQFGYQR RASDDGKLTD SSKTSNTIRV
	FLPNKQRTVV NVRNGMSLHD CLMKALKVRG LQPECCAVFR LLQEHKGKKA RLDWNTDAAS
	LIGEELQVDF LDHVPLTTHN FARKTFLKLA FCDICQKFLL NGFRCQTCGY KFHEHCSTKV
	PTMCVDWSNI RQLLLFPNST VGDSGVPAPP SFPMRRMRES VSRMPASSQH RYSTPHAFTF
	NTSSPSSEGS LSQRQRSTST PNVHMVSTTL HVDSRMIEDA IRSHSESASP SALSSSPNNL
	SPTGWSQPKT PVPAQRERAP GSGTQEKNKI RPRGQRDSSY YWEIEASEVM LSTRIGSGSF
	GTVYKGKWHG DVAVKILKVV DPTPEQLQAF RNEVAVLRKT RHVNILLFMG YMTKDNLAIV
	TQWCEGSSLY KHLHVQETKF QMFQLIDIAR QTAQGMDYLH AKNIIHRDMK SNNIFLHEGL
	TVKIGDFGLA TVKSRWSGSQ QVEQPTGSVL WMAPEVIRMQ DDNPFSFQSD VYSYGIVLYE
	LMAGELPYAH INNRDQIIFM VGRGYASPDL SRLYKNCPKA MKRLVADCVK KVKEERPLFP
	QILSSIELLQ HSLPKINRSA SEPSLHRAAH TEDINACTLT TSPRLPVF Sequence without tag. TI

proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

#### Characteristics:

Key Benefits:

- · Made to order protein from design to production by highly experienced protein experts.
- Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

#### **Target Details**

Target:

RAF1

Alternative Name:

Raf1 (RAF1 Products)

# Background:

RAF proto-oncogene serine/threonine-protein kinase (EC 2.7.11.1) (Proto-oncogene c-RAF) (cRaf) (Raf-1),FUNCTION: Serine/threonine-protein kinase that acts as a regulatory link between the membrane-associated Ras GTPases and the MAPK/ERK cascade, and this critical regulatory link functions as a switch determining cell fate decisions including proliferation, differentiation, apoptosis, survival and oncogenic transformation. RAF1 activation initiates a mitogen-activated protein kinase (MAPK) cascade that comprises a sequential phosphorylation of the dual-specific MAPK kinases (MAP2K1/MEK1 and MAP2K2/MEK2) and the extracellular signal-regulated kinases (MAPK3/ERK1 and MAPK1/ERK2). The phosphorylated form of RAF1 (on residues Ser-338 and Ser-339, by PAK1) phosphorylates BAD/Bcl2-antagonist of cell death at 'Ser-75'. Phosphorylates adenylyl cyclases: ADCY2, ADCY5 and ADCY6, resulting in their

activation. Phosphorylates PPP1R12A resulting in inhibition of the phosphatase activity. Phosphorylates TNNT2/cardiac muscle troponin T. Can promote NF-kB activation and inhibit signal transducers involved in motility (ROCK2), apoptosis (MAP3K5/ASK1 and STK3/MST2), proliferation and angiogenesis (RB1). Can protect cells from apoptosis also by translocating to the mitochondria where it binds BCL2 and displaces BAD/Bcl2-antagonist of cell death. Plays a role in the oncogenic transformation of epithelial cells via repression of the TJ protein, occludin (OCLN) by inducing the up-regulation of a transcriptional repressor SNAI2/SLUG, which induces down-regulation of OCLN. Restricts caspase activation in response to selected stimuli, notably Fas stimulation, pathogen-mediated macrophage apoptosis, and erythroid differentiation (By similarity). Regulates Rho signaling and migration, and is required for normal wound healing. {ECO:0000250|UniProtKB:P04049, ECO:0000269|PubMed:15753127}.

Molecular Weight: 72.9 kDa

UniProt: Q99N57

Pathways:

MAPK Signaling, RTK Signaling, Fc-epsilon Receptor Signaling Pathway, Neurotrophin Signaling Pathway, cAMP Metabolic Process, Stem Cell Maintenance, Hepatitis C, Autophagy, Signaling of Hepatocyte Growth Factor Receptor, VEGF Signaling, BCR Signaling

## **Application Details**

**Application Notes:** 

In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions:

For Research Use only

# Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months