

## **Product datasheet for TG320505**

## RAF1 Human shRNA Plasmid Kit (Locus ID 5894)

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** RAF1 Human shRNA Plasmid Kit (Locus ID 5894)

Locus ID: 5894

**Synonyms:** c-Raf; CMD1NN; CRAF; NS5; Raf-1

**Vector:** pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

**Components:** RAF1 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 5894).

5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 002880, NM 001354689, NM 001354690, NM 001354691, NM 001354692,

NM 001354693, NM 001354694, NM 001354695, NR 148940, NR 148941, NR 148942, NM 002880.1, NM 002880.2, NM 002880.3, BC018119, BC018119.2, NM 002880.4

UniProt ID: P04049

Summary: This gene is the cellular homolog of viral raf gene (v-raf). The encoded protein is a MAP kinase

kinase kinase (MAP3K), which functions downstream of the Ras family of membrane associated GTPases to which it binds directly. Once activated, the cellular RAF1 protein can phosphorylate to activate the dual specificity protein kinases MEK1 and MEK2, which in turn phosphorylate to activate the serine/threonine specific protein kinases, ERK1 and ERK2. Activated ERKs are pleiotropic effectors of cell physiology and play an important role in the control of gene expression involved in the cell division cycle, apoptosis, cell differentiation and cell migration. Mutations in this gene are associated with Noonan syndrome 5 and

LEOPARD syndrome 2. [provided by RefSeq, Jul 2008]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



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## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).