

## Product datasheet for **TP710020**

### **RAF1 (NM\_002880) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human v-raf-1 murine leukemia viral oncogene homolog 1 (RAF1),residues Ser306-Phe648, with N-terminal polyhistidine tag,expressed in sf9 cells
<b>Species:</b>	Human
<b>Expression Host:</b>	Sf9
<b>Expression cDNA Clone or AA Sequence:</b>	A DNA sequence from TrueORF clone, RC201983, encoding the region(Ser306-Phe648) of human RAF1
<b>Tag:</b>	N-His
<b>Predicted MW:</b>	39 kDa
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	50 mM Tris-HCl, pH 8.0, 150 mM NaCl, 20% glycerol
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_002873</a>
<b>Locus ID:</b>	5894
<b>UniProt ID:</b>	<a href="#">P04049</a>
<b>RefSeq Size:</b>	3291
<b>Cytogenetics:</b>	3p25.2
<b>RefSeq ORF:</b>	1944
<b>Synonyms:</b>	c-Raf; CMD1NN; CRAF; NS5; Raf-1



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**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]

**Protein Families:**

Druggable Genome, Protein Kinase

**Protein Pathways:**

Acute myeloid leukemia, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, Vascular smooth muscle contraction, VEGF signaling pathway

**Product images:**