

## Product datasheet for PH301983

### RAF1 (NM\_002880) Human Mass Spec Standard

#### Product data:

|                                       |  |
|---------------------------------------|--|
| Product Type:                         | Mass Spec Standards  |
| Description:                          | RAF1 MS Standard C13 and N15-labeled recombinant protein (NP_002871) |
| Species:                              | Human  |
| Expression Host:                      | HEK293   |
| Expression cDNA Clone or AA Sequence: | RC201983   |
| Predicted MW:                         | 73.1 kDa   |
| Protein Sequence:                     | >RC201983 protein sequence<br>Red=Cloning site Green=Tags(s)         |

MEHIQGAWKTISNGFGFKDAVFDGSSCISPTIVQQFGYQRRASDDGKLTDPSKTSNTIRVFLPNKQRTVV  
NVRNGMSLHDCLMKALKVRGLQPECCAVFRLLEHEKGGKARLDWNTDAASLIGEELQVDFLDHVPLTTHN  
FARKTFLKLAFCDICQKFLNNGFRCQTCGYKFHEHCSTKVPTMCVDWSNIRQLLLFPNSTIGDSGVPALP  
SLTMRMRRESVSRMPVSSQHRYSHPHAFNTSSPSSEGLSQRQRSTSTPNVHMVSTTLPVDSRMIEDA  
IRSHSESASPALS SSPNNLSPTGWSQPKTPVPAQRERAPVSGTQEKNKIRPRGQRDSSYYWIEASEVM  
LSTRIGSGSFGTVYKGGKWHGDVAVKILKVVDPTEQFQAFRNEVAVLRKTRHVNILLFMGYMTKDNLAIV  
TQWCEGSSLYKHLHVQETKFQMFQLIDIARQTAQGM DYLHAKNIIHRDMKSNNIFLHEGLTVKIGDFGLA  
TVKSRWSGSQQVEQPTGSVLWMAPEVIRMQDNNPFSFQSDVYSYGIVLYELMTGELPYSHINNRDQIIFM  
VGRGYASPDLSKLYKNCPKAMKRLVADCVKKVKEERPLFPQILSSIPELLQHS LPKINRSASEPSLHRAAH  
TEDINACTLTTSRPLPVF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

|                  |  |
|------------------|--|
| Tag:             | C-Myc/DDK  |
| Purity:          | > 80% as determined by SDS-PAGE and Coomassie blue staining                                |
| Concentration:   | >0.05 µg/µL as determined by microplate BCA method   |
| Labeling Method: | Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine                       |
| Buffer:          | 25 mM Tris-HCl, 100 mM glycine, pH 7.3   |
| Storage:         | Store at -80°C. Avoid repeated freeze-thaw cycles.   |
| Stability:       | Stable for 3 months from receipt of products under proper storage and handling conditions. |
| RefSeq:          | <a href="#">NP_002871</a>  |
| RefSeq Size:     | 3291   |



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RefSeq ORF: 1944

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

Locus ID: 5894

UniProt ID: [P04049](#), [L7RRS6](#)

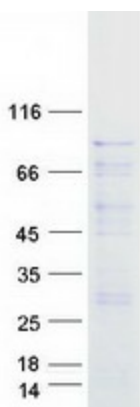
Cytogenetics: 3p25.2

**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:



Coomassie blue staining of purified RAF1 protein (Cat# [TP301983]). The protein was produced from HEK293T cells transfected with RAF1 cDNA clone (Cat# [RC201983]) using MegaTran 2.0 (Cat# [TT210002]).