

Bioactive

RAF1 (Y340D/Y341D) (Human) Recombinant Protein

Catalog # P6554

Size 5 ug

Applications

Result of activity analysis

Result of activity analysis

Specification

Product Description	Human RAF1 (NP_002871.1, 306 a.a. - 648 a.a.) Y340D/Y341D mutant partial recombinant protein with GST-tag at N-terminal using baculovirus expression system.
Host	Viruses
Form	Liquid
Preparation Method	Baculovirus expression system.
Purification	Glutathione sepharose chromatography.
Purity	0.7
Activity	The activity was determined by ELISA. The enzyme was incubated with GST-fused substrate protein, and after stopping kinase reaction by EDTA, the reaction solution was transferred into glutathione-coated plate. Phosphorylation was detected by anti-phospho antibody and HRP-labeled anti-rabbit IgG (or HRP-labeled anti-mouse IgG). Substrate: MAP2K1 [inactive mutant], ATP: 100 uM.
Quality Control Testing	The purity was assessed by SDS-PAGE/CBB staining.
Storage Buffer	50 mM Tris-HCl, 150 mM NaCl, 0.05% Brij35, 1 mM DTT, 10% glycerol, pH7.5
Storage Instruction	Stored at -80°C. Aliquot to avoid repeated freezing and thawing.

Note	Result of activity analysis
	Result of activity analysis

Applications

- Functional Study

Gene Info — RAF1

Entrez GeneID [5894](#)

Protein Accession# [NP_002871.1](#)

Gene Name RAF1

Gene Alias CRAF, NS5, Raf-1, c-Raf

Gene Description v-raf-1 murine leukemia viral oncogene homolog 1

Omim ID [164760](#) [611553](#) [611554](#)

Gene Ontology [Hyperlink](#)

Gene 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]

Other Designations Oncogene RAF1|raf proto-oncogene serine/threonine protein kinase

Pathway

- [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](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [T cell receptor signaling pathway](#)

- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)

Disease

- [Abnormalities](#)
- [Arrhythmias](#)
- [Articulation Disorders](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Cognition Disorders](#)
- [Developmental Disabilities](#)
- [Diabetes Mellitus](#)
- [Dyslexia](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Hearing](#)
- [Heart Defects](#)
- [Hypertrophy](#)
- [Language Disorders](#)
- [LEOPARD Syndrome](#)
- [Memory](#)
- [Motor Skills](#)
- [Noonan Syndrome](#)
- [Skin Abnormalities](#)

- [Thyroid Neoplasms](#)