

Active Recombinant Human BRAF protein, MYC/DDK-tagged

Cat. No. BRAF-22H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human BRAF fused with MYC/DDK tag at C-terminal was expressed in HEK293.
Species	Human
Source	HEK293
Description	This gene encodes a protein belonging to the raf/mil family of serine/threonine protein kinases. This protein plays a role in regulating the MAP kinase/ERKs signaling pathway, which affects cell division, differentiation, and secretion. Mutations in this gene are associated with cardiofaciocutaneous syndrome, a disease characterized by heart defects, mental retardation and a distinctive facial appearance. Mutations in this gene have also been associated with various cancers, including non-Hodgkin lymphoma, colorectal cancer, malignant melanoma, thyroid carcinoma, non-small cell lung carcinoma, and adenocarcinoma of lung. A pseudogene, which is located on chromosome X, has been identified for this gene.
Form	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	BRAF kinase activity was measured in an HTRF® assay. Varying concentrations of BRAF were added to a reaction mix containing ATP and a biotinylated kinase substrate (HTRF substrate 2) and was incubated at 37°C for phosphorylation. HTRF detection reagents were then added, the reaction was incubated for 30 minutes at room temperature. Time-resolved fluorescent signal (Delta R) was measured on a

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Flexstation 3 microplate reader.

Molecular Mass 84.3 kDa

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration >50 ug/mL as determined by microplate BCA method

GENE INFORMATION

Gene Name BRAF v-raf murine sarcoma viral oncogene homolog B1 [Homo sapiens]

Official Symbol BRAF

Synonyms BRAF; v-raf murine sarcoma viral oncogene homolog B1; serine/threonine-protein kinase B-raf; BRAF1; p94; 94 kDa B-raf protein; proto-oncogene B-Raf; murine sarcoma viral (v-raf) oncogene homolog B1; B-Raf proto-oncogene serine/threonine-protein kinase (p94); NS7; RAFB1; B-RAF1; FLJ95109; MGC126806; MGC138284;

Gene ID 673

mRNA Refseq NM_004333

Protein Refseq NP_004324

MIM 164757

UniProt ID P15056

Chromosome Location 7q34

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Pathway	ARMS-mediated activation, organism-specific biosystem; Activation of NMDA receptor upon glutamate binding and postsynaptic events, organism-specific biosystem; Acute myeloid leukemia, organism-specific biosystem; Acute myeloid leukemia, conserved biosystem; B Cell Receptor Signaling Pathway, organism-specific biosystem; Bladder cancer, organism-specific biosystem; Bladder cancer, conserved biosystem;
Function	ATP binding; MAP kinase kinase kinase activity; metal ion binding; mitogen-activated protein kinase kinase binding; nucleotide binding; protein binding; protein heterodimerization activity; protein kinase activity; protein serine/threonine kinase activity; receptor signaling protein activity;