

Product datasheet for **TP700031**

B Raf (BRAF) (NM_004333) Mutant (V600E) Human Recombinant Protein

Product data:

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| Product Type: | Recombinant Proteins |
| Description: | Recombinant protein of human v-raf murine sarcoma viral oncogene homolog B1 (BRAF) V600E mutant, expressed in human cells |
| Species: | Human |
| Expression Host: | HEK293T |
| Expression cDNA Clone or AA Sequence: | A DNA sequence from TrueORF clone, RC211013, encoding the V600E mutant form of human BRAF |
| Tag: | C-Myc/DDK |
| Predicted MW: | 84 kDa |
| Concentration: | >0.05 µg/µL as determined by microplate BCA method |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Buffer: | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol |
| Bioactivity: | 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 37C 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 Flexstation 3 microplate reader. Enzyme activity (PMID: 26814611) |
| Note: | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. |
| Storage: | Store at -80°C. |
| Stability: | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| RefSeq: | NP_004324 |
| Locus ID: | 673 |
| UniProt ID: | P15056 |
| RefSeq Size: | 2949 |
| Cytogenetics: | 7q34 |



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|-------------------|---|
| RefSeq ORF: | 2298 |
| Synonyms: | B-raf; B-RAF1; BRAF1; NS7; RAFB1 |
| Summary: | <p>This gene encodes a protein belonging to the RAF family of serine/threonine protein kinases. This protein plays a role in regulating the MAP kinase/ERK signaling pathway, which affects cell division, differentiation, and secretion. Mutations in this gene, most commonly the V600E mutation, are the most frequently identified cancer-causing mutations in melanoma, and have been identified in various other cancers as well, including non-Hodgkin lymphoma, colorectal cancer, thyroid carcinoma, non-small cell lung carcinoma, hairy cell leukemia and adenocarcinoma of lung. Mutations in this gene are also associated with cardiofaciocutaneous, Noonan, and Costello syndromes, which exhibit overlapping phenotypes. A pseudogene of this gene has been identified on the X chromosome. [provided by RefSeq, Aug 2017]</p> |
| Protein Families: | Druggable Genome, Protein Kinase |
| Protein Pathways: | Acute myeloid leukemia, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Focal adhesion, Glioma, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanoma, mTOR signaling pathway, 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, Thyroid cancer, Vascular smooth muscle contraction |

Product images:



