

## Product datasheet for **TP700031**

### **B Raf (BRAF) (NM\_004333) Mutant (V600E) Human Recombinant Protein**

#### **Product data:**

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Recombinant protein of human v-raf murine sarcoma viral oncogene homolog B1 (BRAF) V600E mutant, expressed in human cells
<b>Species:</b>	Human
<b>Expression Host:</b>	HEK293T
<b>Expression cDNA Clone or AA Sequence:</b>	A DNA sequence from TrueORF clone, RC211013, encoding the V600E mutant form of human BRAF
<b>Tag:</b>	C-Myc/DDK
<b>Predicted MW:</b>	84 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>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Bioactivity:</b>	BRAF kinase activity was measured in an HTRF <sup>®</sup> 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: <a href="#">26814611</a> )
<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_004324</a>
<b>Locus ID:</b>	673
<b>UniProt ID:</b>	<a href="#">P15056</a>
<b>RefSeq Size:</b>	2949
<b>Cytogenetics:</b>	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:



