

#### **OriGene Technologies, Inc.**

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# Product datasheet for TP700031

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

#### **Product data:**

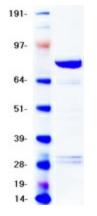
Product Type:	Recombinant Proteins
Description:	Recombinant protein of human v-raf murine sarcoma viral oncogene homolog B1 (BRAF) V600E mutant, expressed in human cells
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	A DNA sequence from TrueORF clone, RC211013, encoding 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: <u>26814611</u> )
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:	<u>NP 004324</u>
Locus ID:	673
UniProt ID:	<u>P15056</u>
RefSeq Size:	2949
Cytogenetics:	7q34



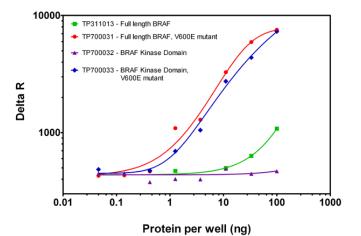
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	B Raf (BRAF) (NM_004333) Mutant (V600E) Human Recombinant Protein – TP700031
RefSeq ORF:	2298
Synonyms:	B-raf; B-RAF1; BRAF1; NS7; RAFB1
Summary:	This gene encodes a protein belonging to the RAF family of serine/threonine protein kinases. This protein 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]
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:



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