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BioActive Human BRAF (V600E) Recombinant Protein,Fc Tag

Catalog Number:SGRP00669

DESCRIPTION	
Product Name	BioActive Human BRAF (V600E) Recombinant Protein,Fc Tag
Gene Name	BRAF
Source	Full length Human BCOR oncogenic mutation, expressed in HEK293 cells.
Alternative names	
SPECIFICATIONS	
Biological Activity	Fully biologically active
Purity	> 95% by SDS-PAGE & HPLC
Endotoxin Level	< 1.0 EU per μg protein as determined by the LAL method
Expression System	HEK293 Cells
Format	Recombinant
Species	Human
Predicted MW	
Actual MW	
Applications	Sandwich ELISA Functional Studies Mass Spectrometry SDS-PAGE HPLC
Form	Lyophilized from sterile PBS, pH 7.52
Concentration	N/A
Stability and Storage	Samples are stable for up to twelve months from date of receipt at -20℃ to -80℃. Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Reconstitution	Reconstitute with Phosphate Buffered Saline.
BACKGROUND	
Gene Accession	P15056
Gene Alias	Protein names Recommended name Serine/threonine-protein kinase B-raf Curated EC number EC:2.7.11.1 2 Publications (UniProtKB | ENZYME | Rhea) Alternative names Proto-oncogene B-Raf p94 v-Raf murine sarcoma viral oncogene homolog B1 Gene names Name BRAF Imported Synonyms BRAF1, RAFB1

	non-Langerhans-cell histiocytosis) and ameloblastoma. The mechanism of the mutation is that the negative charge of the acidic glutamic acid residue causes it to be phosphomimetic. This mimics the phosphorylation of the nearby T599 threonine and S602 serine residues in the activation segment of BRAF, which are used to activate the wild type form of the protein. The glutamate residue of the mutant therefore functions to activate BRAF by inhibiting the interaction of the BRAF's glycine rich loop and activation segment, which would ordinarily be inhibitory. The loss of inhibition of BRAF leads to an increase in its basal activity and hence is oncogenic.
Background	V600E is a mutation of the BRAF gene in which valine (V) is substituted by glutamic acid (E) at amino acid 600. It is a driver mutation in a proportion of certain diagnoses, including melanoma, hairy cell leukemia, papillary thyroid carcinoma, colorectal cancer, non-small-cell lung cancer, Langerhans cell histiocytosis, Erdheim–Chester disease (a