

BioActive Human BRAF (G466V) Recombinant Protein, Fc Tag

Catalog Number: SGRP00678

DESCRIPTION	
Product Name	BioActive Human BRAF (G466V) Recombinant Protein, Fc Tag
Gene Name	BRAF
Source	Full length Human BRAF (Y472C), 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 7.61
Concentration	N/A
Stability and Storage	Samples are stable for up to twelve months from date of receipt at -20°C to -80°C. Store it under sterile conditions at -20°C to -80°C. 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

decreased cell proliferation and cell viability as compared to wild-type BRAF. This variant is a rare BRAF mutation and accounts for < 1% of BRAF mutations in colorectal adenocarcinoma. A single preclinical study of BRAF G466V in colon cancer demonstrated sensitivity to anti-EGFR tyrosine kinase therapy (cetuximab) and a MEK inhibitor (trametinib), however, there was no benefit seen with the RAF inhibitor vemurafinib. The clinicopathologic significance of BRAF G466V remains to be fully elucidated.

Background

BRAF G466V is present in 0.08% of AACR GENIE cases, with lung adenocarcinoma, colon adenocarcinoma, endometrial endometrioid adenocarcinoma, melanoma, and endometrial carcinoma having the greatest prevalence. BRAF G466V is a missense mutation which impairs BRAF kinase activity but paradoxically activates MEK and ERK through transactivation of c-RAF. This variant is associated with