Recombinant Human KRAS (G12D) Protein

Catalog Number	552113
Species	Human
Expression System	E.coli
Accession	P01116
Gene ID	3845
Molecular Weight	Predictes a molecular mass of 21.5 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23.7 kDa band.

Product Information

Amino Acid Sequence	MNHKVHHHHH HENLYFQSMT EYKLVVVGAD GVGKSALTIQ LIQNHFVDEY DPTIEDSYRK QVVIDGETCL LDILDTAGQE EYSAMRDQYM RTGEGFLCVF AINNTKSFED IHHYREQIKR VKDSEDVPMV LVGNKCDLPS RTVDTKQAQD LARSYGIPFI ETSAKTRQGV DDAFYTLVRE IRKHKEK
Form	Lyophilized powder
Formulation	Lyophilized from sterile 25 mM HEPES, 150 mM NaCl, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Predicted N-terminal	Met
Protein Construction	DNA encoding 1-169 aa (P01116-2, G12D) was fused with a 6-His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	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.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	This product is a soluble recombinant human KRAS4b (G12D mutant) protein (amino acid 1-169) with an N-terminal 6×His tag. Purified from Escherichia coli prokaryotic expression system, the protein possesses high solubility and stable biological properties. The G12D oncogenic mutation induces sustained activation of KRAS GTPase activity, driving abnormal cell proliferation. It is an essential tool protein for tumor oncogenic mechanism research and targeted drug efficacy evaluation.