# Recombinant Human KRAS (G13D) Protein

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| **Catalog Number** | 552116 |
| **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

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| **Amino Acid Sequence** | MNHKVHHHHH HENLYFQSMT EYKLVVVGAG DVGKSALTIQ 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, G13D) was fused with a 6-His tag. |

## Storage & Handling

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| **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.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | This product is a soluble recombinant human KRAS4b (G13D mutant) protein (amino acid 1-169) with an N-terminal 6×His tag. The protein is solubly expressed and purified from Escherichia coli with high purity and stable batch consistency. The G13D site mutation impairs the GTPase activity of KRAS4b, resulting in abnormal activation of cell growth and metabolism signals. It is widely used in cancer genomics research and small-molecule inhibitor development. |