

Human KRAS Protein, His Tag

Catalog # KRS-H5547



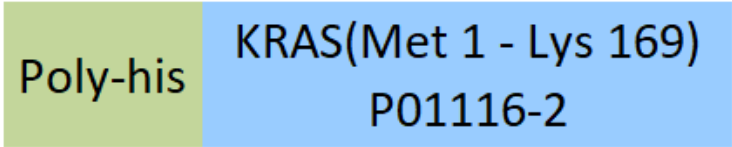
Synonym

GTPase Kras,K-Ras 2,Ki-Ras,c-K-ras,c-Ki-ras,KRAS2,RASK2,C-K-RAS,CFC2,K-RAS2A,K-RAS2B,K-RAS4A,K-RAS4B,KI-RAS,KRAS1,KRAS2,NS,NS3,RASK2,KRAS

Source

Human KRAS, His Tag(KRS-H5547) is expressed from Baculovirus-Insect cells. It contains AA Met 1 - Lys 169 (Accession # [P01116-2](#)).
Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.
The protein has a calculated MW of 21.3 kDa. The protein migrates as 23-25 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 0.5 M NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

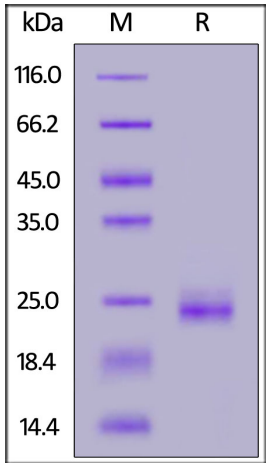
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

- This product is stable after storage at:
- -20°C to -70°C for 12 months in lyophilized state;
 - -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human KRAS, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Background

KRAS (Kirsten rat sarcoma 2 viral oncogene homolog) gene is a proto-oncogene that encodes a small GTPase transductor protein called KRAS. KRAS is also known as Ki-Ras, c-K-ras and c-Ki-ras. Ras proteins bind GDP/GTP and possess intrinsic GTPase activity. Plays an important role in the regulation of cell proliferation, promoting oncogenic events by inducing transcriptional silencing of tumor suppressor genes (TSGs) in colorectal cancer (CRC) cells in a ZNF304-dependent manner. RAS is one of the



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most frequently mutated oncogenes in human cancer but the frequency and distribution of RAS gene mutations are not uniform. In details, mutation of glycine 12 (G12) causes RAS activation by interfering with GAP binding and GAP-stimulated GTP hydrolysis. The reference shows the pathway may as a potential therapy targets.

