Unconjugated Human KRAS Protein, His,Avitag™ (active enzyme)

Catalog # KRS-H51Q5

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

Unconjugated Human KRAS Protein, His,Avitag (KRS-H51Q5) is expressed from *E. coli* cells. It contains AA Thr 2 - Cys 185 (Accession # P01116-2).

Molecular Characterization

This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 24.7 kDa. The protein migrates as 26-27 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Endotoxin

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

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM Tris, 500 mM NaCl, pH7.4 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

Storage

Please avoid repeated freeze-thaw cycles.

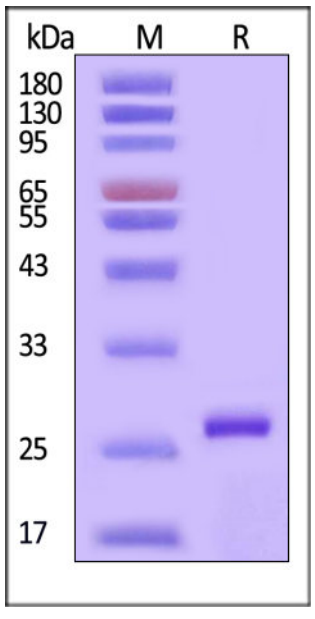
This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

ACRO Quality Management System

- QMS(ISO, GMP)
- Quality Advantages
- Quality Control Process

SDS-PAGE



Unconjugated Human KRAS Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity

The specific activity of KRAS was determined to be > 300 pmol/min/mg in a GTPase-Glo assay using GTP solution substrate (QC tested).

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 most frequently mutated oncogenes in human cancer but the frequency and distribution of RAS gene mutations are not uniform.