

# Recombinant Human V-Ki-ras2 Kirsten Rat Sarcoma Viral Oncogene Homolog

**Cat. No.** KRAS-1246H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant humanKRAS containing 188 amino acids.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Description</b>      | KRAS proteins are members of the superfamily of small GTP-binding proteins that function as molecular switches controlling a variety of signaling and transport pathways. KRAS, one of three classic human Ras genes, is spliced to two different isoforms, K-RAS4A and K-RAS4B. K-RAS4B is the predominant product of the alternative splicing pathway and the KRAS protein encoded by the commonly mutated Ras gene in human cancer. Protein preparation is 100% GDP-loaded, measured by HPLC. |
| <b>Form</b>             | Liquid in 64 mM Tris-HCl, pH 7.2 + 10 mM MgCl <sub>2</sub> + 5 mM DTE                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Molecular Weight</b> | 21.4 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Purity</b>           | > 95% as determined by SDS-PAGE analysis                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage</b>          | Stable for 1 year in working aliquots at -80°C. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Official Symbol</b>  | KRAS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

## GENE INFORMATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | KRAS v-Ki-ras2 Kirsten ratsarcoma viral oncogene homolog [ Homo sapiens ]                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Synonyms</b>            | KRAS; v-Ki-ras2Kirsten rat sarcoma viral oncogene homolog; NS; NS3; KRAS1; KRAS2; RASK2;KI-RAS; C-K-RAS; K-RAS2A; K-RAS2B; K-RAS4A; K-RAS4B; GTPase KRas; K-Ras 2;c-Ki-ras; oncogene KRAS2; K-ras p21 protein; OTTHUMP00000245391;OTTHUMP00000245393; c-Kirsten-ras protein; PR310 c-K-ras oncogene;transforming protein p21; cellular c-Ki-ras2 proto-oncogene; v-Ki-ras2Kirsten rat sarcoma 2 viral oncogene homolog; Kirsten rat sarcoma-2 viral(v-Ki-ras2) oncogene homolog |
| <b>Gene ID</b>             | 3845                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>mRNA Refseq</b>         | NM_004985                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Protein Refseq</b>      | NP_004976                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>MIM</b>                 | 190070                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>UniProt ID</b>          | P01116                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Chromosome Location</b> | 12p12.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Pathway</b>             | ARMS-mediatedactivation; B cell receptor signaling pathway; Cell surface interactions atthe vascular wall; Developmental Biology; EGFR1 Signaling Pathway; Fc epsilonRI signaling pathway; G Protein Signaling Pathways; HTLV-I infection; IL-2Signaling Pathway;; MAPK signaling pathway; Natural killer cell mediatedcytotoxicity; Pancreatic cancer; RAF phosphorylates MEK; SOS-mediatedsignalling; T cell receptor signaling pathway                                       |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Function**

GDP binding; GMPbinding; GTP binding; GTPase activity; LRR domain binding;  
Ralganyl-nucleotide exchange factor activity; nucleotide binding; proteinbinding

**Rendering of 1D8D.**

