

# Recombinant Rat RASK Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP52254

Size: 10ug, 100ug

Protein Name: GTPase KRas (EC 3.6.5.2) (K-Ras 2) (Ki-Ras) (c-K-ras) (c-Ki-ras) [Cleaved into: GTPase KRas, N-terminally processed]

Synonym: Kras, Kras2

UniProt ID: P08644

UniProt Link: [www.uniprot.org/uniprotkb/P08644/entry](http://www.uniprot.org/uniprotkb/P08644/entry)

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 189 AA

Molecular Weight: 22 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MTEYKLVVVGAGGVGKSALTIQLIQNHFVDEYDPTIEDSYRKQVVIDGETCLLDILDITAGQEEYSAMR  
DQYMRTGEGFLCVFAINNTKSFEDIHHYREIQIKRVKDSQEDVPMVLVGKCDLPSRTVDTKQAQELAR  
SYGIPFIETSAKTRQRVEDAFYTLVREIRQYRLKKISKEEKTGCGVKIKKCVIM

## 3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

## 4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

## 5. Product Description

This product is recombinant GTPase KRas (EC 3.6.5.2) (K-Ras 2) (Ki-Ras) (c-K-ras) (c-Ki-ras) [Cleaved into: GTPase KRas, N-terminally processed] produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

**Protein Function:** Signal transducer in the Ras-MAPK signaling pathway that regulates cell proliferation and survival (PubMed:3110778). Ras proteins bind GDP/GTP and possess intrinsic GTPase activity (By similarity). Activates MAPK1/MAPK3 resulting in phosphorylation and ultimately degradation of GJA1 (PubMed:29959233). Plays a role in promoting oncogenic events by inducing transcriptional silencing of tumor suppressor genes (TSGs) in colorectal cancer (CRC) cells in a ZNF304-dependent manner (By similarity). Recognized by LZTR1 that mediates its ubiquitination by a BCR (BTB-CUL3-RBX1) E3 ubiquitin-protein ligase complex (By similarity).

**Subcellular Localization:** Cell membrane ; Lipid-anchor ; Cytoplasmic side . Endomembrane system . Cytoplasm .; [Isoform 2B]: Cell membrane ; Lipid-anchor .

## 6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.