Recombinant RASK protein (His tag)

Catalog Number	541975
Synonyms	K-Ras 2; Ki-Ras; c-K-ras; c-Ki-ras
Species	Human
Expression System	E. coli
Accession	P01116
Molecular Weight	Predictes a molecular mass of 22.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	1-186
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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℃
Protein Construction	DNA encoding 1-186 aa (P01116) were fused with 6His tag.

Storage & Handling

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

Description

Description	Recombinant GTPase KRas (EC 3.6.5.2) Fragment (residues 1-186) is a high-purity, soluble protein designed for structural and biochemical studies. This fragment encompasses key functional regions, offering researchers a stable tool to investigate KRas-mediated signaling pathways and its critical role in cell proliferation and oncogenesis. GTPase KRas, encoded by the KRAS gene in Homo sapiens, is a member of the Ras protein family that binds GDP/GTP and exhibits intrinsic GTPase activity. It plays a vital role in regulating cell proliferation and has been implicated in promoting oncogenic events, such as transcriptional silencing of tumor suppressor genes in colorectal cancer cells via a ZNF304-dependent mechanism. The full-length protein localizes to the cell membrane, endomembrane system, and cytoplasm, where it functions as a lipid-anchored protein on the cytoplasmic side, facilitating its involvement in key cellular signaling processes. The provided fragment (residues 1-186) represents a stable, soluble unit ideal for exploring KRas structure-function relationships and its contributions to disease pathways.