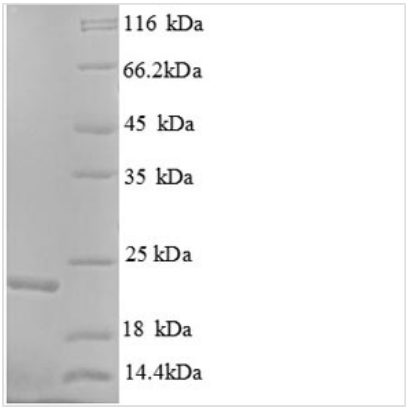
Recombinant Human GTPase KRas (KRAS), partial

Product Code	CSB-EP012493HU1
Relevance	Ras proteins bind GDP/GTP and possess intrinsic GTPase activity. Plays an important role in the regulation of cell proliferation .Curated2 Publications
Abbreviation	Recombinant Human KRAS protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P01116
Alias	K-Ras 2Ki-Rasc-K-rasc-Ki-ras
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	TEYKLVVVGAGGVGKSALTIQLIQNHFVDEYDPTIEDSYRKQVVIDGETCLLDILDTAGQEEYSAMRDQYMRTGEGFLCVFAINNTKSFEDIHHYREQIKRVKDSEDVPMVLVGNKCDLPSRTVDTKQAQDLARSYGIPFIETSAKTRQRVEDAFYTLVREIRQYRL
Research Area	Epigenetics and Nuclear Signaling
Source	E.coli
Target Names	KRAS
Expression Region	2-168aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	23.1kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The Human KRAS recombinant protein is conventionally generated by transfecting the recombinant DNA into a host cell, and then the host cells are cultured and the transfected DNA transcribed and translated. Different host cells can be chosen for recombinant protein production, the choice of which depends on the type of protein that needs to be generated, its functional activity and requisite yield. We choose E.coli as the expression system for this KRAS protein expression because bacteria cells are easy to culture, grow fast and produce high yields of recombinant protein.

KRAS is a protein coding gene that encodes GTPase KRas. According to some research, KRAS may have the following features.
KRAS mutation status predicts colorectal cancer response to cetuximab therapy. KRAS proteins play an important role in human cancers but have not yet succumbed to therapeutic attack. By determining the mutational status of EGFR and KRAS, treatment decisions regarding the use of these kinase inhibitors may be improved. GTPase KRAS inhibits the p53 tumor suppressor by activating the NRF2-regulated antioxidant defense system in cancer cells. The quantitative biophysical analysis identified key components that regulate the recruitment of the GTPase KRAS to the plasma membrane.

Shelf Life

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