


Rev03
Update: Dec,14,2021

DATASHEET

KRAS, His, Human (G12C)

Cat. No.: Z03597

Product Introduction

Species	Human
Protein Construction	
Purity	> 90% as analyzed by SDS-PAGE
Endotoxin Level	≤ 1 EU/μg of protein by gel clotting method
Expression System	E. coli
Theoretical Molecular Weight	23.8 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Background

Target Background : The KRAS gene provides instructions for making a protein called K-Ras, part of the RAS/MAPK pathway. The protein relays signals from outside the cell to the cell's nucleus. These signals instruct the cell to grow and divide (proliferate) or to mature and take on specialized functions (differentiate). The K-Ras protein is a GTPase, which means it converts a molecule called GTP into another molecule called GDP. In this way the K-Ras protein acts like a switch that is turned on and off by the GTP and GDP molecules. KRAS is usually tethered to cell membranes because of the presence of an isoprene group on its C-terminus. There are two protein products of the KRAS gene in mammalian cells that result from the use of alternative exon 4 (exon 4A and 4B respectively): K-Ras4A and K-Ras4B, these proteins have different structure in their C-terminal region and use different mechanisms to localize to cellular membranes including the plasma membrane.

Synonyms : C-K-RAS; CFC2; K-RAS2A; K-RAS2B; K-RAS4A; K-RAS4B; KI-RAS; KRAS1; KRAS2; RASK2; K-ras

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