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# KRAS

Catalog # PVGS1615

## Product Information

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| **Primary Accession** | P01116-2 |
| **Species** | Human |
| **Sequence** | Met1-Cys185 (Gly12Asp) |
| **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 dd$H_2O$ 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. |

## Additional Information

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| **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. |

## Protein Information

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.