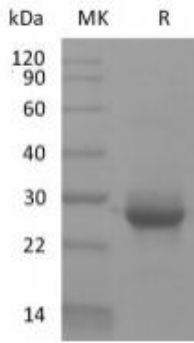


Recombinant Human KRAS(G12V)

Catalog#:P00403 Derived from *E.coli*

DESCRIPTION	<p>Recombinant Human GTPase Kras is produced by our <i>E.coli</i> expression system and the target gene encoding Thr2-Cys185(Gly12Val) is expressed with a 6His tag at the N-terminus.</p> <p>Accession#: AAH13572.1</p> <p>Known as: Ki- Ras; c- K-ras; KRAS2; RASK2; CFC2</p>
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at <-20°C, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at 4-7°C for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than 100μg/ml.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass:23.6kDa AP Mol Mass:25-30kDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.</p>
BACKGROUND	<p>K- Ras belongs to the small GTPase superfamily, Ras family. As other members of the Ras family, K- Ras is a GTPase and is an early player in many signal transduction pathways. It is usually tethered to cell membranes because of the presence of an isoprenyl group on its C-terminus. K- Ras functions as a molecular on/off switch. Ras proteins bind GDP/GTP and possess intrinsic GTPase activity. Plays an important role in the regulation of cell proliferation. 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. Besides essential function in normal tissue signaling, the mutation of a K- Ras gene is an essential step in the development of many cancers. Several germline K- Ras mutations have been found to be associated with Noonan syndrome and cardio-facio-cutaneous syndrome. Somatic K- Ras mutations are found at high rates in Leukemias, colon cancer, pancreatic cancer and lung cancer.</p>
	<p>SDS-PAGE</p>  <p>kDa MK R</p> <p>120</p> <p>90</p> <p>60</p> <p>40</p> <p>30</p> <p>22</p> <p>14</p>