



KRAS Mutation test

What is KRAS Mutation test?

KRAS Gene Mutation Test is a genetic test that detects abnormalities in the KRAS gene. It is used to guide treatment for cancer by assisting in the selection of appropriate therapeutic drugs.

What is KRAS Mutation?

- KRAS mutation is an alteration in the gene that gives instructions for the KRAS protein. KRAS mutation is associated with cancers, including colorectal and lung cancers.
- KRAS protein plays a role in increasing the rate of growth and division of cells. Abnormalities in the KRAS gene may cause defects in the KRAS protein that make it more active than normal.
- An overactive KRAS protein causes excessive stimulation of cellular pathways for growth and division, leading to uncontrolled cell proliferation, and thus to cancer.
- **Approximately 30% to 40% of colon cancers and 15% to 30% of lung cancers have KRAS mutations.**

Why should do the test?

- To assist (and in some cases, confirm) the initial diagnosis
- To distinguish other tumors/conditions that have similar histological features, when examined by a pathologist under the microscope
- To help in determining treatment options
- To confirm recurrence of the tumor: Tumor recurrence can either be at the original tumor site, or at a distant location (away from the initial site)

When To Get Tested?

When you have colon cancer that has spread (metastatic) or non-small cell lung cancer

Sample Required

A sample of tumor tissue obtained through a biopsy procedure

How the test is done?

A tumor tissue sample is collected will provide us the adequate amount of DNA required for accessing the KRAS gene using modern molecular biology technique.

Turnaround time

8-10 days

Why to choose Greenarray?

- Greenarray ensures high accuracy and low false positive rate with the use of advanced sequencing techniques.
- Safe and reliable

References:

- Lee B, Lee B, Han G, Kwon MJ, Han J, Choi YL. KRAS Mutation Detection in Non-small Cell Lung Cancer Using a Peptide Nucleic Acid-Mediated Polymerase Chain Reaction Clamping Method and Comparative Validation with Next-Generation Sequencing. *Korean J Pathol.* 2014;48(2):100-107. doi:10.4132/KoreanJPathol.2014.48.2.100
- Tan C, Du X. KRAS mutation testing in metastatic colorectal cancer. *World J Gastroenterol.* 2012;18(37):5171-5180. doi:10.3748/wjg.v18.i37.5171

About Green Array

Green Array is a molecular diagnostic company. We offers diagnosis of infectious diseases, genetic testing and healthcare information to improve health and wellness. Our goal is to provide high quality affordable and accessible services.