



1-800-533-1710

KRAS Somatic Mutation Analysis

KRASP

PATIENT NAME TESTINGKRASP, ABNORMAL				ORDER NUMBER K302000025
PATIENT ID R064476	DATE OF BIRTH 10/10/1951	AGE 69 Y	SEX Male	REQUESTED BY CLIENT CLIENT
COLLECTED 2/2/2021, 12:00 AM	RECEIVED 2/2/2021, 10:41 AM	REPORTED 2/18/2021, 12:54 PM		
The collected, received, and reported dates and times on the report are in the time zone of the performing location.				CLIENT ORDER NUMBER
VALIDC Test Validation's MML 35 characters City MN 123456789				CLIENT MRN R064476

RESULT SUMMARY

POSITIVE

RESULT

Provided diagnosis: colorectal adenocarcinoma

KRAS status: Mutant

INTERPRETATION

ASSOCIATIONS BETWEEN KRAS MUTATIONS AND COLORECTAL CANCER

Approximately 35% of patients with colorectal adenocarcinoma have a somatic mutation in the KRAS gene (1). KRAS mutations, primarily those occurring at codons 12, 13, and 61, result in constitutive activation of the RAS/MAPK signaling pathway.

Current data suggests that the efficacy of EGFR-targeted therapies in colorectal cancer is limited to patients with tumors lacking KRAS mutations. Thus, the detection of a KRAS activating mutation within this tumor suggests that EGFR-targeted therapies may have limited therapeutic value for this patient (2,3).

REFERENCES

1. cancer.sanger.ac.uk/cancergenome/projects/cosmic/
2. Ann Oncol. 2013 Aug;24(8):2062-7 (PMID 23666916)
3. N Engl J Med. 2013 Sep 12;369(11):1023-34 (PMID 24024839)

SPECIMEN

Tissue, Tumor

TISSUE ID

1234

METHOD

Microscopic examination was performed by a pathologist to identify areas of tumor for enrichment by macrodissection. Tumor DNA was isolated and evaluated for the presence of KRAS codons 12, 13, 61, and 146 mutations using digital

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21-5209



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droplet PCR analysis.

DISCLAIMER

Test results should be interpreted in the context of clinical findings, family history, and other laboratory data. If results obtained do not match other clinical or laboratory findings, please contact the laboratory for possible interpretation. Misinterpretation of results may occur if the information provided is inaccurate or incomplete.

Rare polymorphisms exist that could lead to false-negative or false-positive results.

This assay was designed to detect KRAS codon 12, 13, 61, and 146 mutations.

A negative result does not rule out the presence of a mutation that may be present but below the limit of detection for this assay (approximately 0.1-0.5%).

TEST CLASSIFICATION

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

RELEASED BY

Kevin C. Halling, M.D., Ph.D.

Code : MCR Laboratory : Mayo Clinic Laboratories - Rochester Main Campus
Lab Director : WILLIAM G MORICE, II MD, PhD CLIA Certificate : 24D0404292

Address : 200 FIRST STREET SW
ROCHESTER MN 55905