

Test Description

NRAS mutation test is an in vitro diagnostic test for the qualitative detection of mutations in codons 12, 13, 59, 61, 117 and 146 of *NRAS* oncogene.

Patient Demographic

Name: Mufeed Abdulmajeed

Sex: Male

Date of Birth/Age: 63 Years

Disease: Metastatic Adenocarcinoma Colon

PATIENT

REPORT DATE 11 Apr 2019 BOOKING ID 011904090381

Clinician

Clinician Name: Dr Randeep Singh Medical Facility: Artemis Hospital

Pathologist: Not Provided

Mufeed Abdulmajeed

Specimen

Site: Rectosigmoid

Sample Type: FFPE block S 1903/19(2) Date of Collection: 09-04-2019 Date of Booking: 09-04-2019

NRAS Mutation Analysis

Result

No Mutation Detected in NRAS

GENOMIC FINDINGS

No mutation detected

INTERPRETATION

No Mutation detected in *NRAS* codons 12, 13, 59, 61, 117 and 146.

METHODOLOGY

The NRAS Mutation Test, performed on the Biocartis Idylla™ system, is an *in vitro* diagnostic test for the qualitative detection of 18 mutations (G12C, G12S, G12D, G12A, G12V, G13D, G13V, G13R, A59T, Q61H/Q61H, Q61K/R/L, K117N/K117N and A146T/V) in codons 12, 13, 59, 61, 117 and 146 of the *NRAS* gene. Formalin-fixed paraffinembedded (FFPE) human cancer tissue is lysed liberate DNA for subsequent real-time PCR amplification using allele specific primers. Two sample processing controls (SPC) are amplified simultaneously i.e. (1) a conserved region of the NRAS gene (referred to as NRAS-Total) and (2) a conserved region of the BRAF gene. The presence of a mutant genotype is determined by calculating the difference between the *NRAS* Sample Processing Control Cq and the Cq obtained for the *NRAS* mutant signal(s).

The analytic sensitivity of this assay has been determined at < or = 5%

REFERENCES

- $1. \quad \text{Allegra et al. J Clin Oncol (2016) } 34{:}179{-}85$
- 2. Boleij et al. BMC Cancer (2016) 16:825.

April 11, 2019

Dr Gulshan Yadav, MD, Consultant Pathology

Date