

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: Zarrina Dadabaeva
Sex: Female
Date of Birth/Age: 30 Years
Disease: Poorly Differentiated Adenocarcinoma

Clinician

Clinician Name: Dr Prashant Mehta
Medical Facility: Asian Hospital
Pathologist: Not Provided

Specimen

Site: Caecum with Ascending Colon
Sample Type: FFPE block S 3419/19F
Date of Collection: 26-07-2019
Date of Booking: 26-07-2019

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 paraffin-embedded (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 $\leq 5\%$

REFERENCES

1. Allegra et al. J Clin Oncol (2016) 34:179-85
2. Boleij et al. BMC Cancer (2016) 16:825.



Dr Gulshan Yadav, MD, Consultant Pathology

July 26, 2019

Date