

EGFR MUTATIONAL ANALYSIS

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(PCR, Sequencing, Fragment analysis)	
EGFR Exon 18 Mutation	Detected, G719S
EGFR Exon 19 Mutation	Not Detected
EGFR Exon 20 Mutation	Not Detected
EGFR Exon 21 Mutation	Not Detected

Note:

1. This is an in-house developed test useful for the detection of point mutations and insertions/deletions in Exons 18 - 21.
2. Sequencing detects Point mutations while Fragment analysis detects insertions/deletions
3. The tissue should contain at-least 10% of tumor cells .
4. This assay does not detect mutations located in regions of the genes that are not analyzed and gross genetic alterations including most large deletions, duplications, and inversions.

Comment

The identification of EGFR as an oncogene has led to the development of anticancer therapeutics directed against EGFR (called "EGFR inhibitors"), including Gefitinib and Erlotinib for lung cancer, and Cetuximab for colon cancer. Patients positive for EGFR mutations benefit from Tyrosine kinase inhibitors like Gefitinib. About 20% of Non Small Cell Lung Cancer (NSCLC) carry the EGFR mutation and 85% of these patients benefit from therapy with Erlotinib and Gefitinib.

This assay can detect the following mutations :

E709, G719, delE746-A750, delE746-T751insA, delE746-T752insV, delL747-T750insP, delL747-T751, delL747-S752, delL747-P753insS, S768, T790M, L858, L861 etc.