

BRAF MUTATION ANALYSIS

BRAF MUTATION ANALYSIS (PCR, Sequencing)	Detected/ Not detected/ inhibition detected
---	---

Note:

1. This is an in-house developed test useful for the detection of point mutations
2. The tissue should contain at-least 10% of tumor cells
3. 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
4. In case inhibition of PCR is detected, a repeat sample is requested

Comment

Mutations in the BRAF gene can cause disease in two ways. First, mutations can be inherited and cause birth defects. Second, mutations can appear later in life and cause cancer, as an oncogene.

Inherited mutations in this gene cause cardiofaciocutaneous syndrome, a disease characterized by heart defects, mental retardation and a distinctive facial appearance.

More than 30 mutations of the BRAF gene associated with human cancers have been identified in Hairy cell leukemia (100%), Non-Hodgkin lymphoma, Colorectal cancer (5%), Malignant melanoma (80%), Papillary thyroid carcinoma, Non-small-cell lung carcinoma, and Adenocarcinoma lung (1-3%).