

NRAS**NRAS-BRAF****ctNRAS-BRAF**

IDYLLA™ NRAS MUTATION DETECTION ON SOLID AND LIQUID BIOPSIES

BACKGROUND INFORMATION*

Activating mutations in the *RAS* genes are observed in 9-30% of all cancers and have been associated with sensitivity and resistance to a number of targeted anti-cancer therapeutics.¹² Cancers in which *NRAS* mutations are observed include colorectal, lung, thyroid cancers and melanoma. According to ESMO⁹, NCCN¹⁴, ASCO¹⁶ and the CAP/AMP/ASCO guidelines¹⁵, genotyping of clinically actionable mutations at a sensitivity of 5% in *RAS* genes exon 2 (codons 12 and 13), exon 3 (codons 59 and 61) and exon 4 (codons 117 and 146) is now mandatory on tumor tissue (either primary or metastasis) of all metastatic colorectal cancers, since the presence of these mutations

correlate with the lack of response to certain anti-EGFR antibody therapies⁹. About 5% of all metastatic colorectal tumors harbor mutations in exons 2, 3 and 4 of the *NRAS* gene.¹³ In metastatic colorectal cancer *BRAF* mutation status should be assessed alongside the assessment of tumor *RAS* mutational status for prognostic assessment (the presence of a *BRAF* mutation indicates poor prognosis). Using liquid biopsies for *NRAS-BRAF* testing is minimally invasive, fast and easy to perform and can be used as an alternative or complement to tissue testing to determine the *RAS* mutation status at diagnosis.

*Idylla™ *RAS* Mutation Tests are validated for use in mCRC

NRAS-BRAF**NRAS**

DIAGNOSTIC PRODUCT

Idylla™ **NRAS-BRAF** Mutation Test (CE IVD)

Idylla™ **NRAS** Mutation Test (CE IVD)

Diagnostic use

 approx. **120** min
sample-to-result

< 2 min
hands-on time 

5 in *BRAF* codon 600* mutations

18 In *NRAS* codons 12,13,59 61,117,146 mutations

 **FFPE**

Directly on FFPE tissue sections (5-10 µm) from **metastatic colorectal cancer**



Qualitative genotype call + Cq values



Mutation detection for **baseline treatment**

*Only available in Idylla™ *NRAS-BRAF* mutation Test

ctNRAS-BRAF

DIAGNOSTIC PRODUCT

Idylla™ **ctNRAS-BRAF** Mutation Test (CE IVD)

Diagnostic use

 approx. **110** min
sample-to-result

< 1 min
hands-on time 

18 In *NRAS* codons 12,13,59 61,117,146 mutations

5 in *BRAF* codon 600 mutations



Directly on 1 ml plasma from **mCRC patients**



Qualitative genotype call + Cq values



Mutation detection for **baseline treatment**