

Analysis of Mutations in RAS Extension Codons

NOTE: This RAS Extension report is intended to be used only in combination with the dedicated NRAS Pyro Kits and RAS Extension Pyro Kits indicated for applications described in the respective NRAS Pyro Kits and RAS Extension Pyro Kits handbooks.

Run Info

Run Name	RAS Extension example run
Operator	QIAGEN
Run Date/Time	2015-05-20 12:31:06
Instrument Method	PyroMark Q24 Method 005
Plate ID	RAS Extension example run

Summary

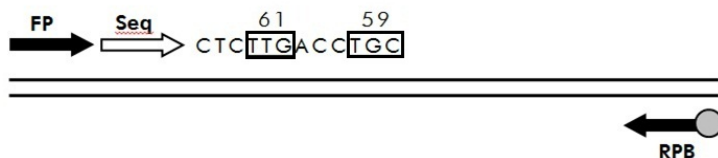
Well	Assay Name	Sample ID	Result	Frequency [% units]	Nucleotide Substitution	Amino Acid Substitution	Info
A1	KRAS Codon 59	wild-type control	No mutation detected				
A2	KRAS Codon 117	wild-type control	No mutation detected				
A3	KRAS Codon 146	wild-type control	No mutation detected				
A4	NRAS Codon 12 and 13	wild-type control	No mutation detected				
A5	NRAS Codon 59	wild-type control	No mutation detected				
A6	NRAS Codon 61	wild-type control	No mutation detected				
A7	NRAS Codon 117	wild-type control	No mutation detected				
A8	NRAS Codon 146	wild-type control	No mutation detected				
B1	KRAS Codon 59	sample	Mutation	35.0	175G>A	A59T	
B2	KRAS Codon 117	sample	No mutation detected				
B3	KRAS Codon 146	sample	Mutation	29.6	437C>T	A146V	
B4	NRAS Codon 12 and 13	sample	No mutation detected				
B5	NRAS Codon 59	sample	Mutation	20.5	176C>G	A59G	
B6	NRAS Codon 61	sample	No mutation detected				
B7	NRAS Codon 117	sample	Potential low level mutation	5.0	351G>C	K117N	⚠
B8	NRAS Codon 146	sample	No mutation detected				
C1	KRAS Codon 59	NTC	Failed Analysis				⚠
C2	KRAS Codon 117	NTC	Failed Analysis				⚠
C3	KRAS Codon 146	NTC	Failed Analysis				⚠
C4	NRAS Codon 12 and 13	NTC	Failed Analysis				⚠
C5	NRAS Codon 59	NTC	Failed Analysis				⚠
C6	NRAS Codon 61	NTC	Failed Analysis				⚠
C7	NRAS Codon 117	NTC	Failed Analysis				⚠
C8	NRAS Codon 146	NTC	Failed Analysis				⚠

⚠ See detailed results below.

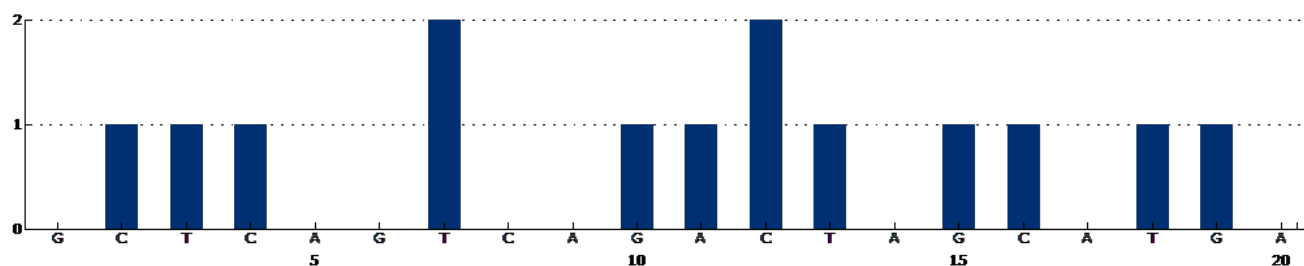
NOTE: The result must be validated by comparing the observed peaks with the expected peak heights displayed as grey bars. For further information about data evaluation and result interpretation please refer to the handbook.

Assay Setups

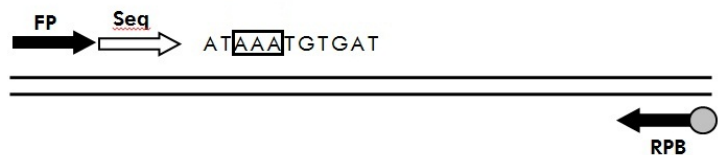
KRAS Codon 59



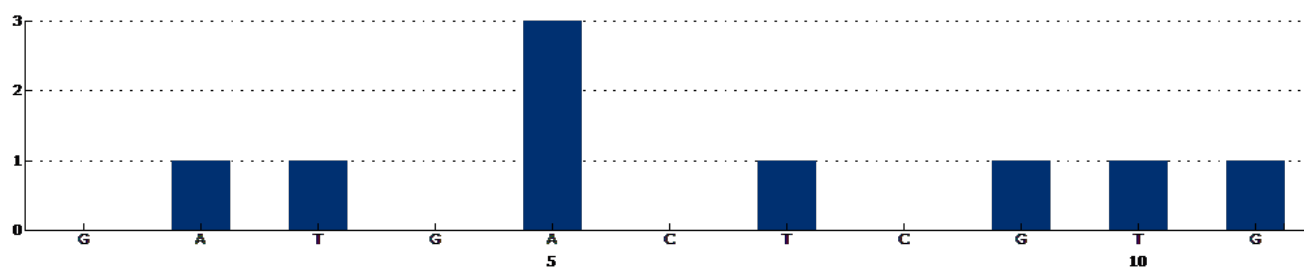
Theoretical Histogram of Wild Type



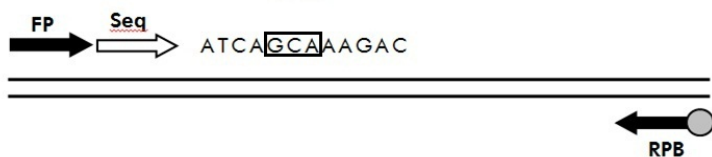
KRAS Codon 117



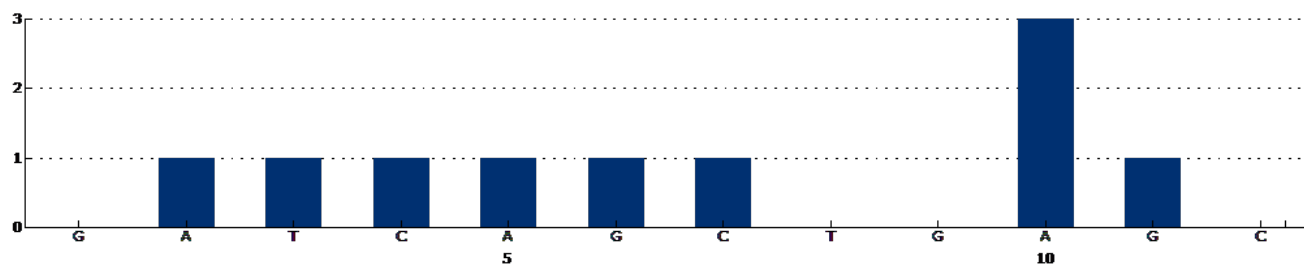
Theoretical Histogram of Wild Type



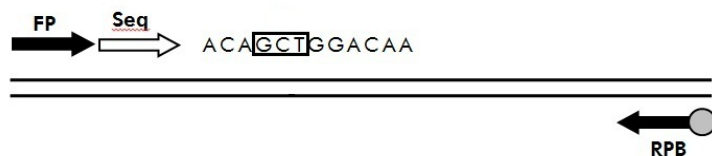
KRAS Codon 146



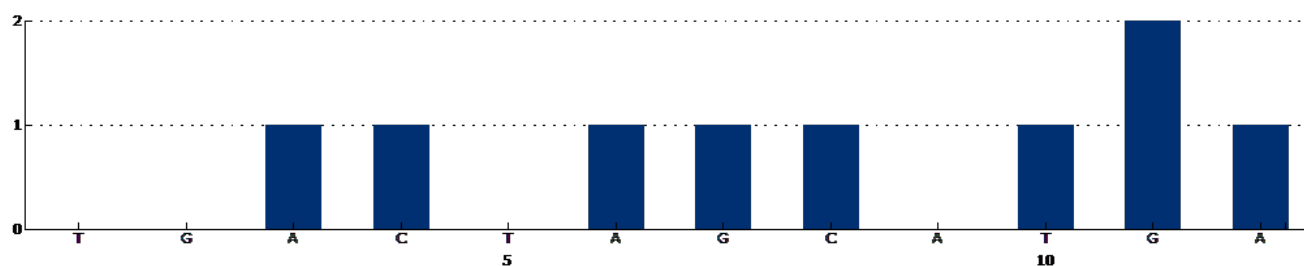
Theoretical Histogram of Wild Type



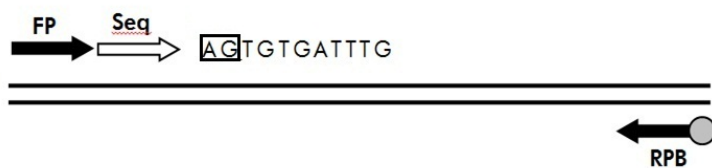
NRAS Codon 59



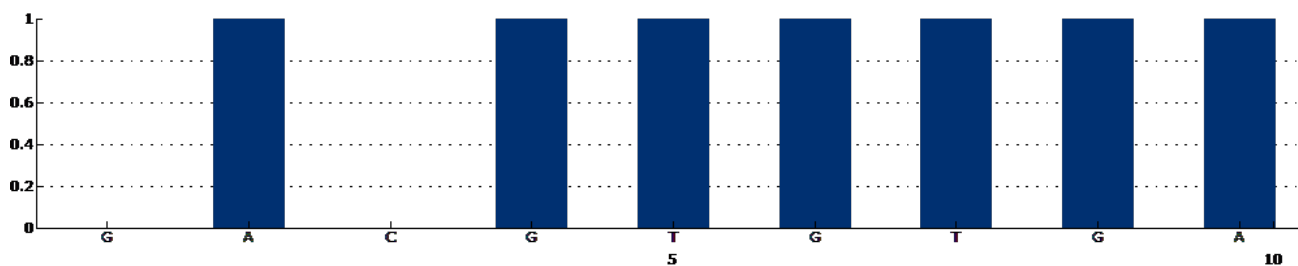
Theoretical Histogram of Wild Type



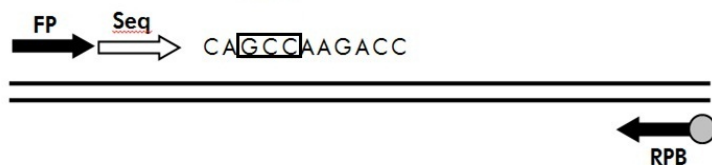
NRAS Codon 117



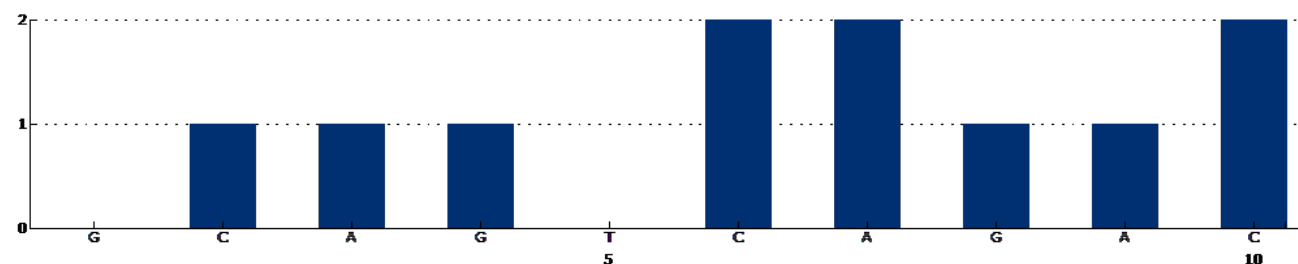
Theoretical Histogram of Wild Type



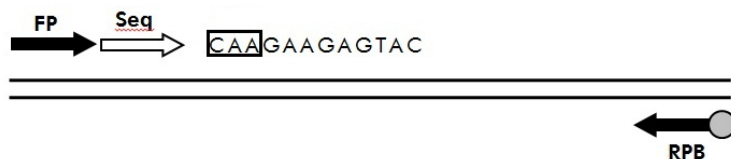
NRAS Codon 146



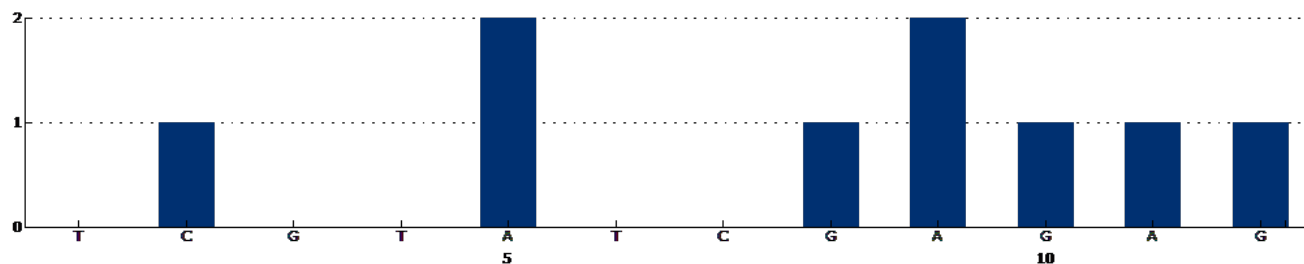
Theoretical Histogram of Wild Type



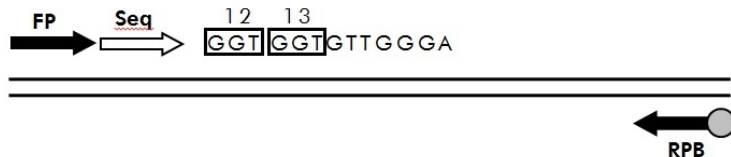
NRAS Codon 61



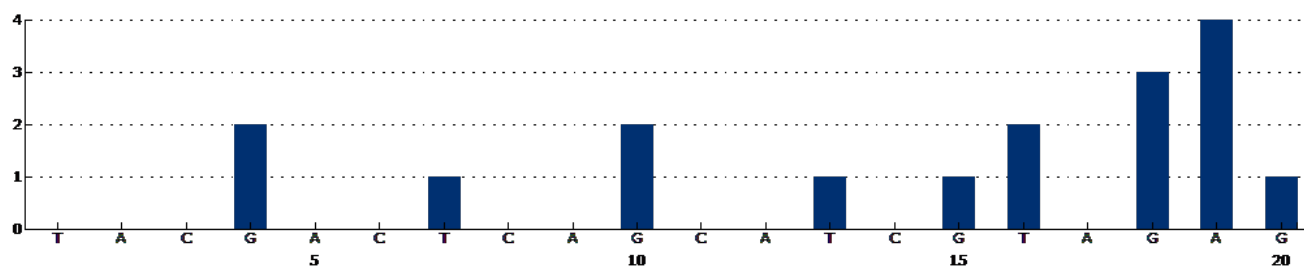
Theoretical Histogram of Wild Type



NRAS Codon 12 and 13



Theoretical Histogram of Wild Type

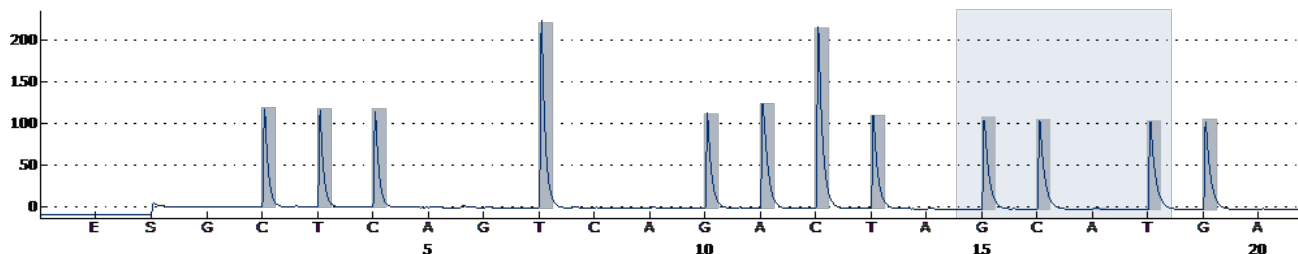


Detailed Results

Well: A1

Assay: KRAS 59+61

Sample ID: wild-type control

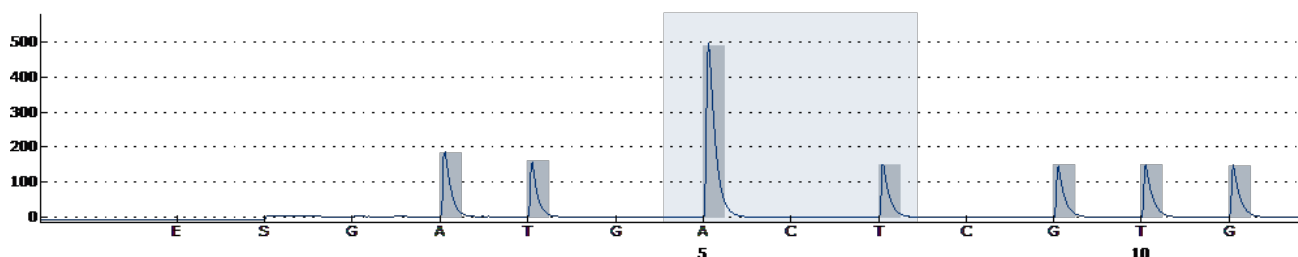


Result	No mutation detected
Quality	Passed

Well: A2

Assay: KRAS 117

Sample ID: wild-type control

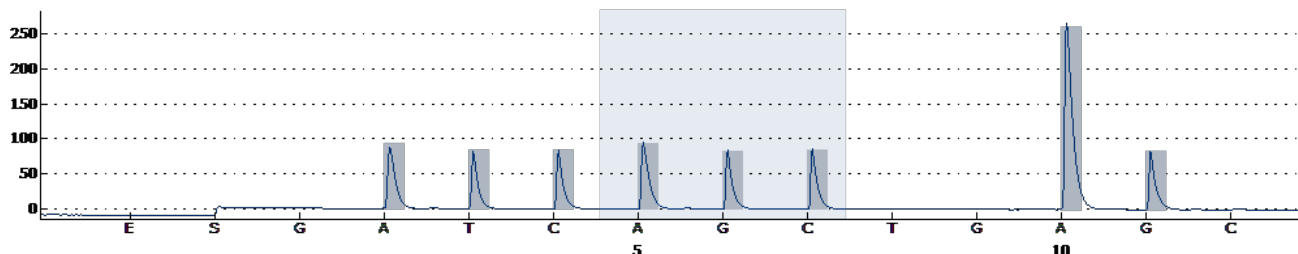


Result	No mutation detected
Quality	Passed

Well: A3

Assay: KRAS 146

Sample ID: wild-type control

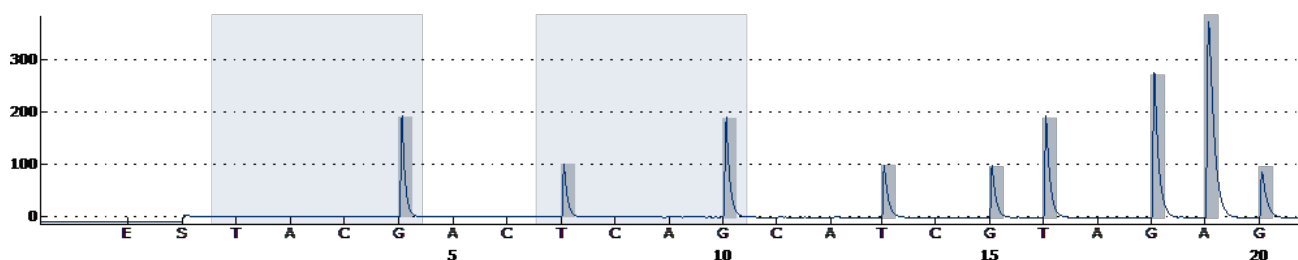


Result	No mutation detected
Quality	Passed

Well: A4

Assay: NRAS 12+13

Sample ID: wild-type control

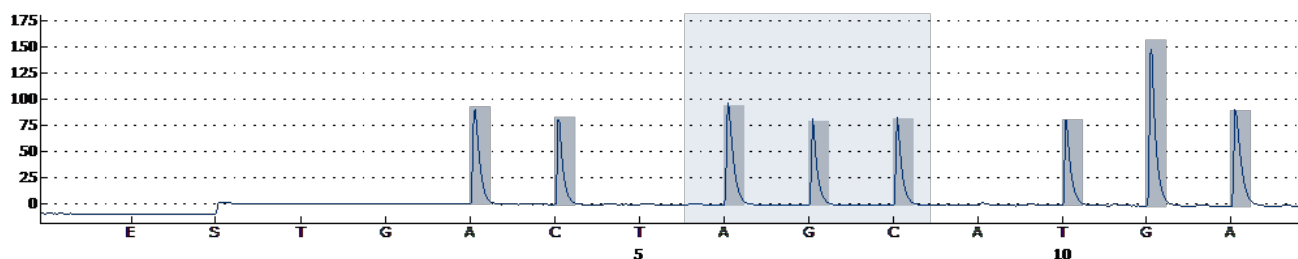


Result	No mutation detected
Quality	Passed

Well: A5

Assay: NRAS 59

Sample ID: wild-type control

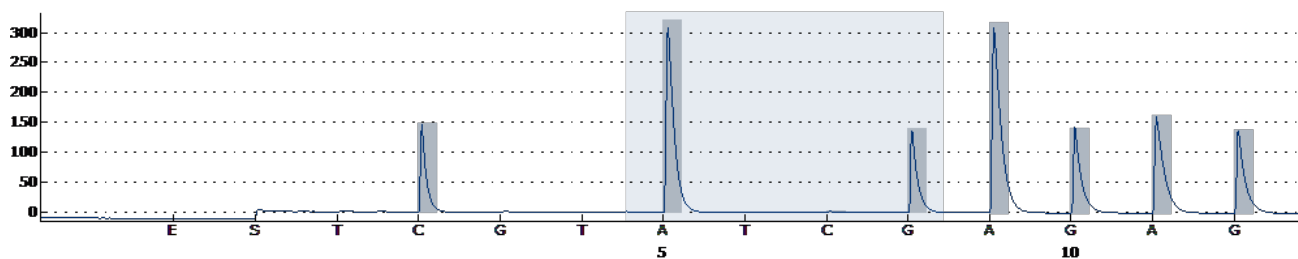


Result	No mutation detected
Quality	Passed

Well: A6

Assay: NRAS 61

Sample ID: wild-type control

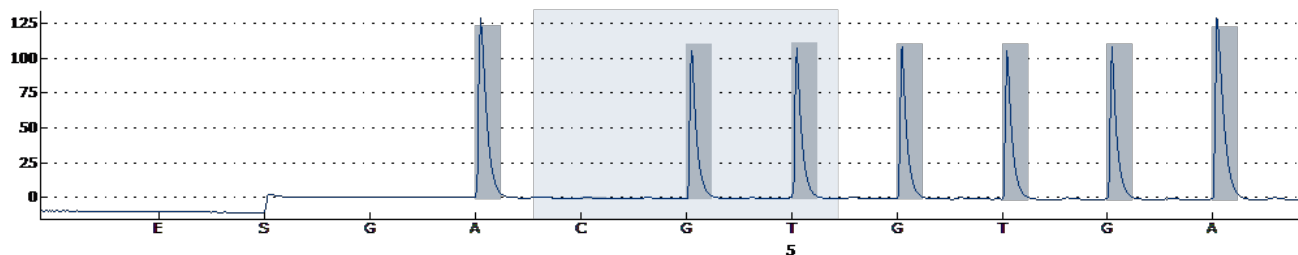


Result	No mutation detected
Quality	Passed

Well: A7

Assay: NRAS 117

Sample ID: wild-type control

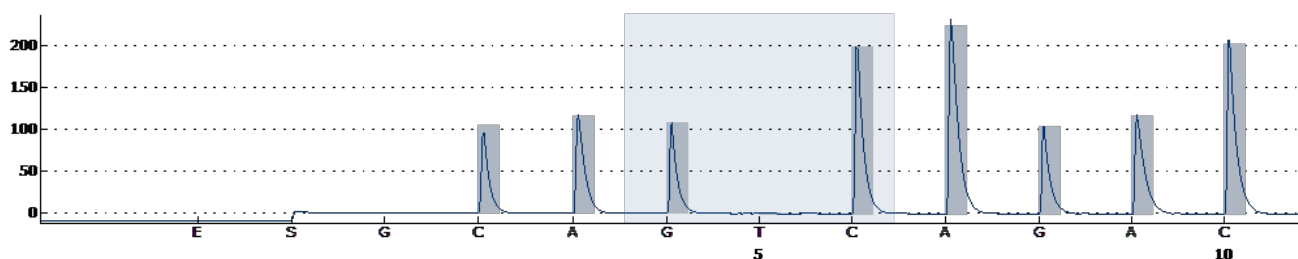


Result	No mutation detected
Quality	Passed

Well: A8

Assay: NRAS 146

Sample ID: wild-type control

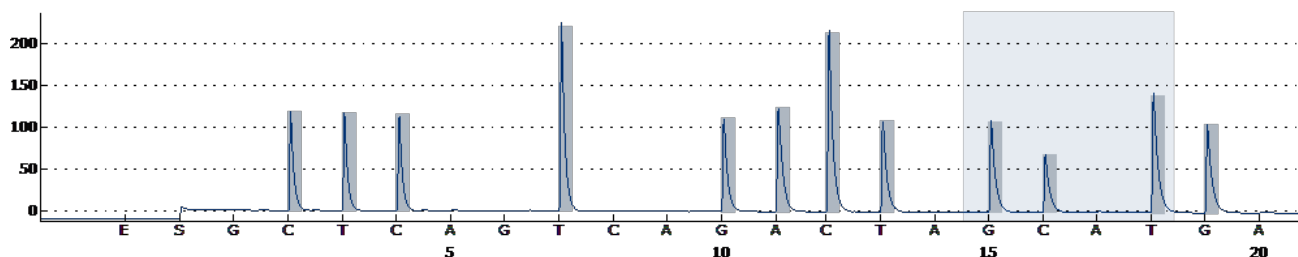


Result	No mutation detected
Quality	Passed

Well: B1

Assay: KRAS 59+61

Sample ID: sample

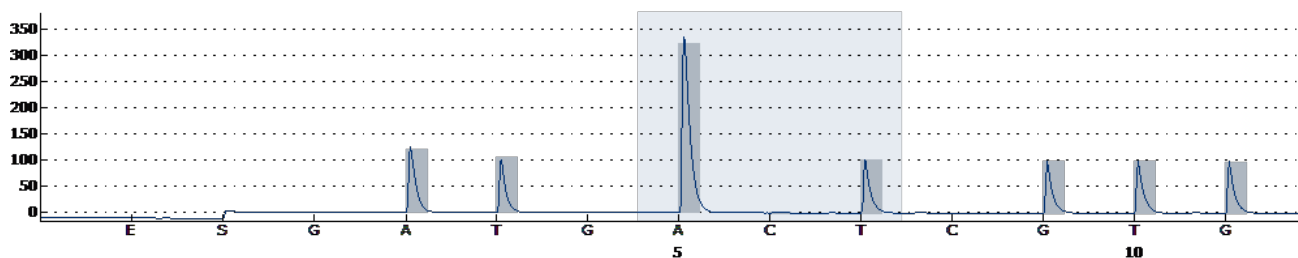


Result	Mutation
Frequency	35.0 % units (LOD: 3.5 % units)
Nucleotide Substitution	175G>A
Amino Acid Substitution	A59T
Quality	Passed

Well: B2

Assay: KRAS 117

Sample ID: sample

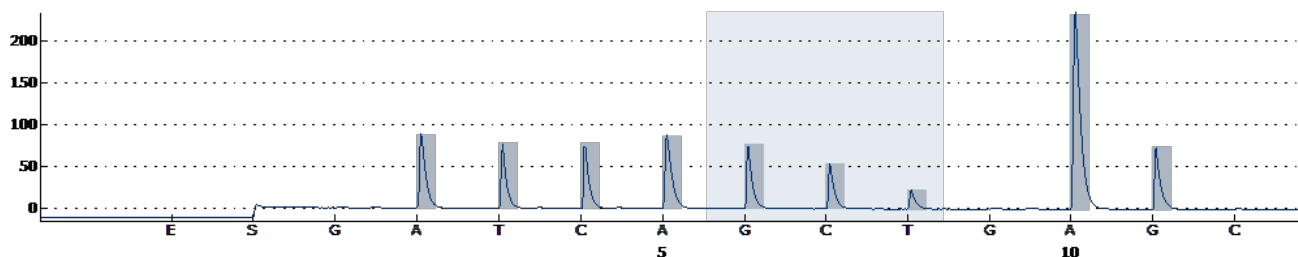


Result	No mutation detected
Quality	Passed

Well: B3

Assay: KRAS 146

Sample ID: sample

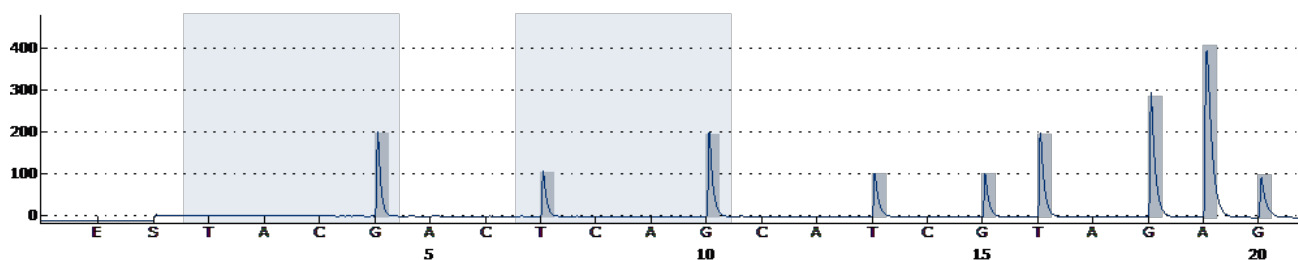


Result	Mutation
Frequency	29.6 % units (LOD: 5.1 % units)
Nucleotide Substitution	437C>T
Amino Acid Substitution	A146V
Quality	Passed

Well: B4

Assay: NRAS 12+13

Sample ID: sample

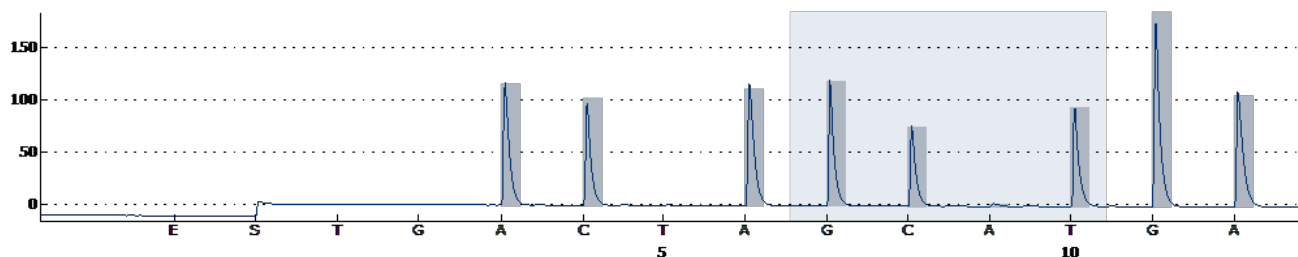


Result	No mutation detected
Quality	Passed

Well: B5

Assay: NRAS 59

Sample ID: sample

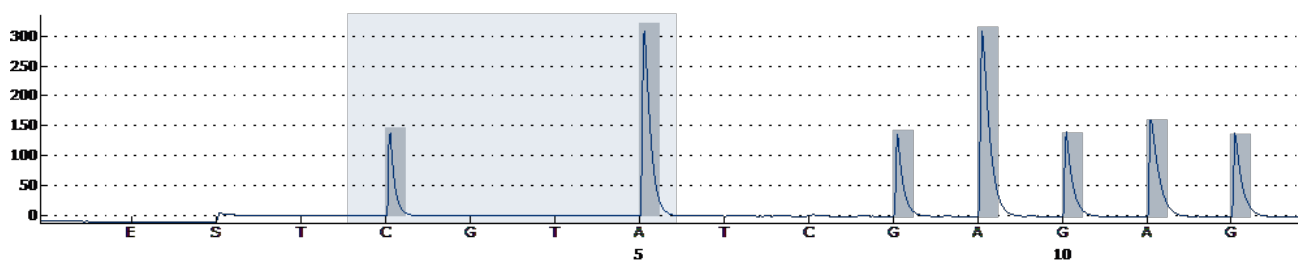


Result	Mutation
Frequency	20.5 % units (LOD: 3.0 % units)
Nucleotide Substitution	176C>G
Amino Acid Substitution	A59G
Quality	Passed

Well: B6

Assay: NRAS 61

Sample ID: sample

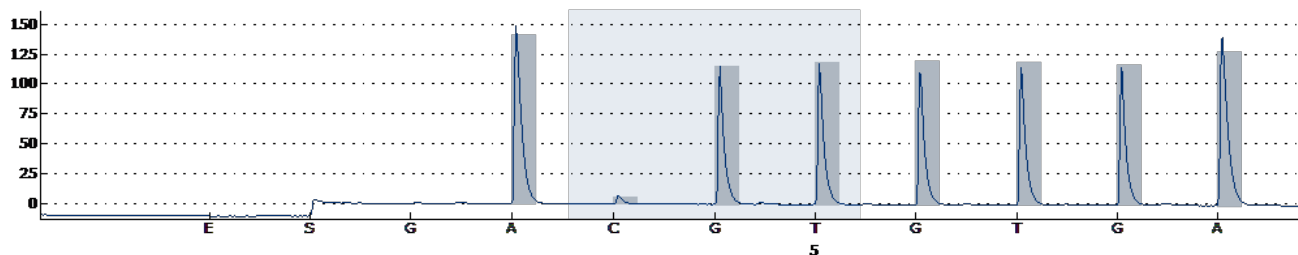


Result	No mutation detected
Quality	Passed

Well: B7

Assay: NRAS 117

Sample ID: sample

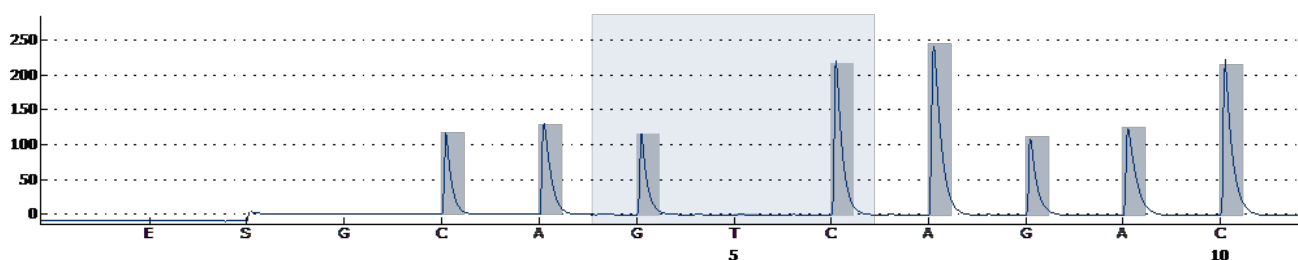


Result	Potential low level mutation
Frequency	5.0 % units (LOD: 4.4 % units)
Nucleotide Substitution	351G>C
Amino Acid Substitution	K117N
Quality	Check
Warnings	Only judge as mutation if verified in duplicate and if different from WT control. Otherwise judge as wildtype.

Well: B8

Assay: NRAS 146

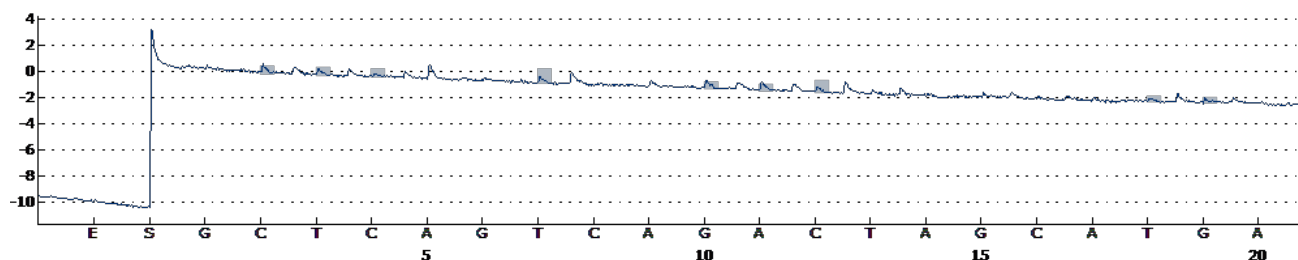
Sample ID: sample



Result	No mutation detected
Quality	Passed

Well: C1

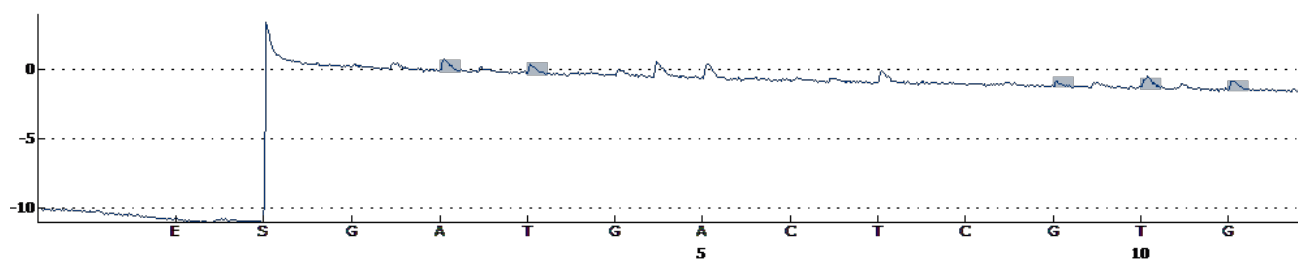
Assay: KRAS 59+61
Sample ID: NTC



Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).

Well: C2

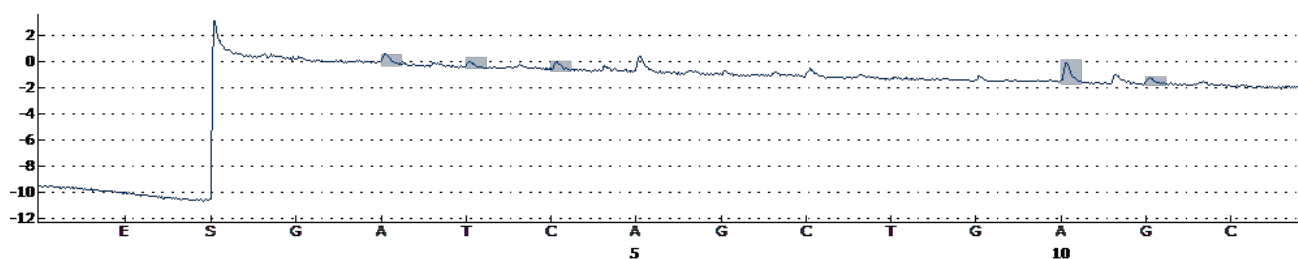
Assay: KRAS 117
Sample ID: NTC



Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).

Well: C3

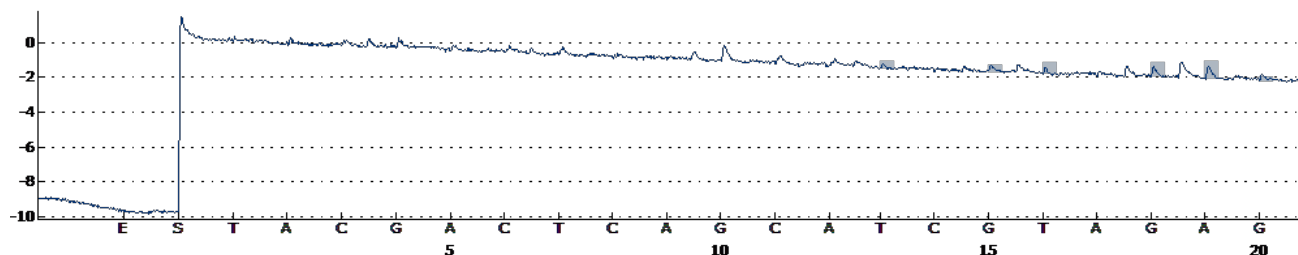
Assay: KRAS 146
Sample ID: NTC



Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).

Well: C4

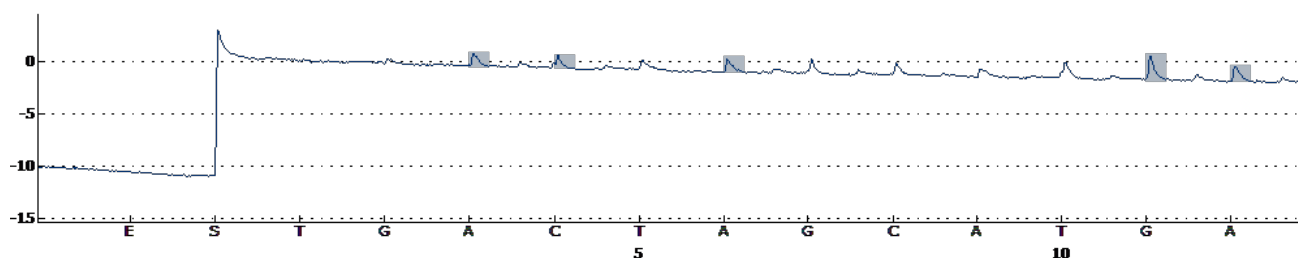
Assay: NRAS 12+13
Sample ID: NTC



Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).

Well: C5

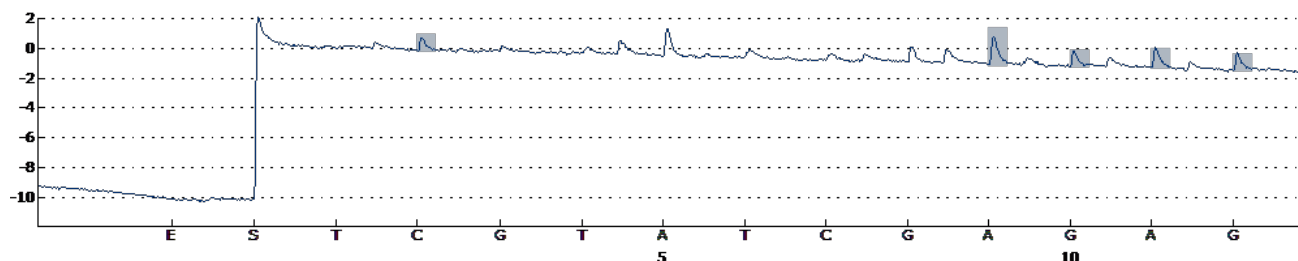
Assay: NRAS 59
Sample ID: NTC



Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).

Well: C6

Assay: NRAS 61
Sample ID: NTC

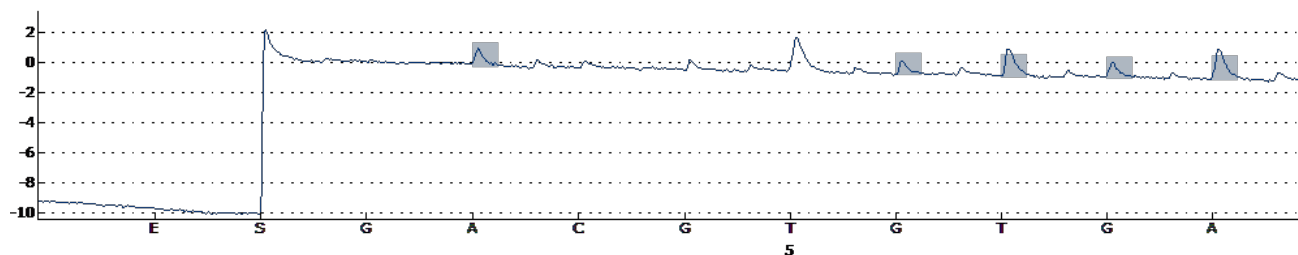


Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).

Well: C7

Assay: NRAS 117

Sample ID: NTC

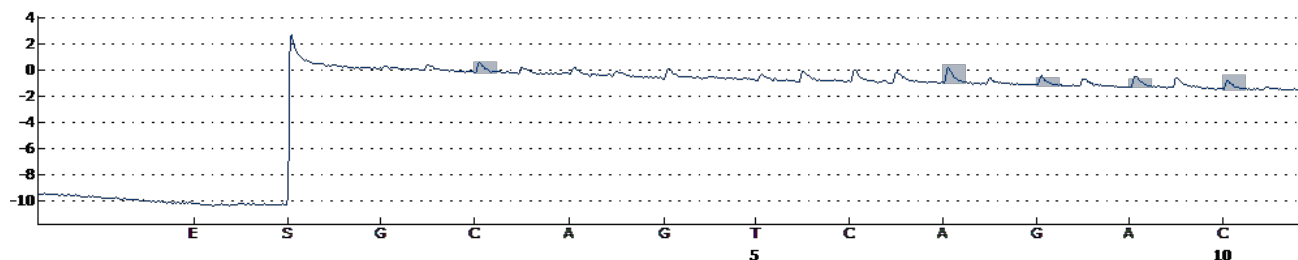


Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).

Well: C8

Assay: NRAS 146

Sample ID: NTC



Result	None
Quality	Insufficient data for analysis
Warnings	Not analyzable due to lack of data (overall).