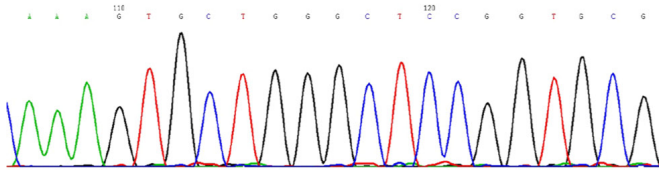


Figure S1. Sequencing traces for the epidermal growth factor receptor mutations determined using direct sequencing assays.

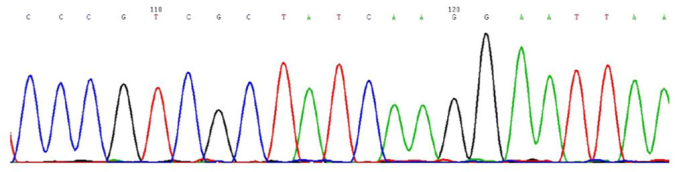
Exon 18

CTTGTGGAGCCTCTTACCCCAGTGGAGAAGCTCCCAACCAAGCTCTCTTGAGGATCTTGAAG
GAAACTGAATCAAAAAGATCAAAGTGTGGGCTCCGGTTCGGCACGGGTATAAG



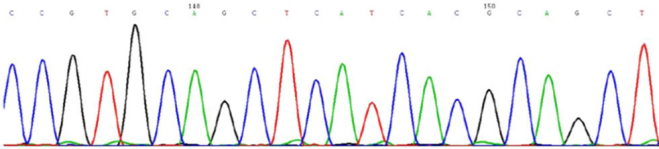
Exon 19

GGACTCTGGATCCAGAAGGTGAGAAAGTAAAATTCCCCTCGCTATCAAGGAATTAAGAGAA
GCAACATCTCCGAAAGCCAACAAGGAAATCCTCGAT



Exon 20

GAAGCCTACGTGATGGCCAGCGTGGACAACCCACAGTGTCCGCTGCTGGGCACTGCGCTC
ACCTCCACCGTGCAGCTCATCACGAGCTCATGCCCTTCGGCTGCCTCCTGGACTATGTCGGG
AACACAAGACAATATTGGTCCAGTACCTGCTCAACTGGTGTGTGAGATCGCAAAG



Exon 21

GGCATGAACACTTGGAGGACCGTCGCTTGGTGCACCGGACCTGGCAGCCAGGAACGTACT
GGTGAAAACACCGCAGCATGTCAAGATCACAGATTTGGGCTGGCCAAACTGCTGGGTGCGG
AAGAGAAAGAATACCATGCAGAAGGAGGCAAA

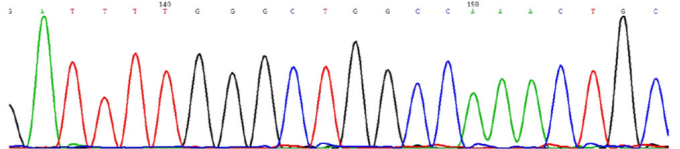
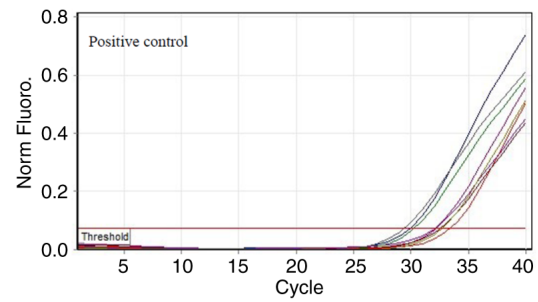


Figure S2. PCR data of the epidermal growth factor receptor mutations determine using amplified refractory mutation system-Scorpion assays.

Sample analysis criteria:

Assays	Positive control Ct range	Cut-off ΔCt
Control	28.13 to 34.59	-
01. T790M	30.22 to 34.98	7.40
02. Deletions	28.90 to 34.90	8.00
03. L858R	29.97 to 34.81	8.90
04. L861Q	28.49 to 34.02	8.90
05. G719X	29.42 to 34.19	8.90
06. S768I	28.98 to 35.19	8.90
07. Insertions	27.92 to 34.09	8.00



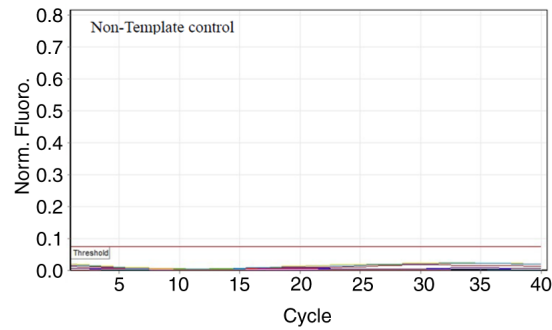
No.	Color	Name	Ct	Assay		
57	Blue	PC	30.01	Control	PASS	28.13 to 34.59
No.	Color	Name	Ct	Assay	delta Ct	Criteria
58	Purple	PC	32.13	T790M	PASS	30.22 to 34.98
59	Red	PC	32.24	Deletions	PASS	28.90 to 34.90
60	Red	PC	33.5	L858R	PASS	29.97 to 34.81
61	Green	PC	30.33	L861Q	PASS	28.49 to 34.02
62	Brown	PC	32.64	G719X	PASS	29.42 to 34.19
63	Olive	PC	32.76	S768I	PASS	28.98 to 35.19
64	Grey	PC	29.46	Insertions	PASS	27.92 to 34.09

$$[\text{mutation Ct}] - [\text{control Ct}] = \Delta Ct$$

Sample cut-off ΔCt : (Mutant Ct)-(Control Ct)

If the Sample cut-off $\Delta Ct \leq$ cut-off ΔCt , the mutation is detected.

If the Sample cut-off $\Delta Ct >$ cut-off ΔCt , the mutation is not detected



No.	Color	Name	Ct	Assay		
65	Red	NTC		Control		
No.	Color	Name	Ct	Assay	delta Ct	Criteria
66	Yellow	NTC		T790M	-	7.4
67	Blue	NTC		Deletions	-	8.0
68	Purple	NTC		L858R	-	8.9
69	Pink	NTC		L861Q	-	8.9
70	Blue	NTC		G719X	-	8.9
71	Teal	NTC		S768I	-	8.9
72	Red	NTC		Insertions	-	8.0