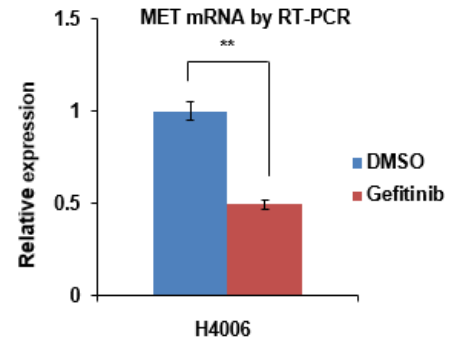


A.

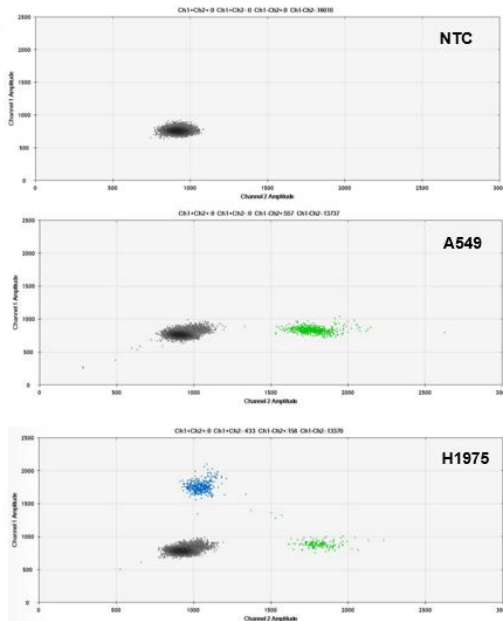
Sample		T790M	Conc.	+	-	A.D	F.A
H4006	DMSO	HEX	253	2867	11962	14829	
		FAM	0	0	14829		
	Gefitinib	HEX	257	3060	12546	15606	
		FAM	0	0	15606		
Control							
NTC		FAM	0	0	13733	13733	
		HEX	0	0	13733		
A549		HEX	12.8	172	15705	15877	
		FAM	0	0	15877		
H1975		HEX	14	201	16763	16964	72.7
		FAM	37.3	530	16434		

B.

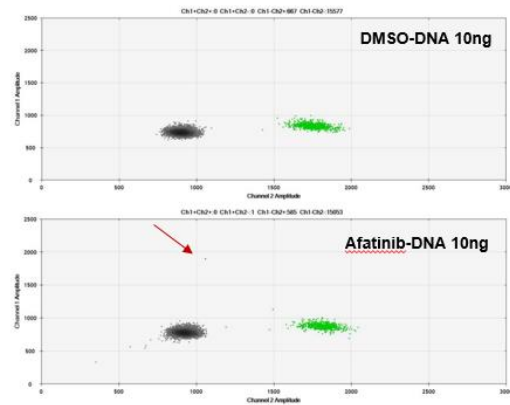


**Figure S1.** Expression of specific gene alterations related to EGFR-TKI resistant mechanism in H4006. (A) *EGFR* T790M mutation changes in H4006 after gefitinib treatment. The T790M mutation allele frequency was measured using the ddPCR assay. NTC: Negative Template Control; A549: T790M negative cell; H1975: T790M positive cell. (B) Change in the *C-MET* mRNA expression level in H4006 after gefitinib treatment. *C-MET* mRNA expression was measured by RT-PCR. Error bars represent the mean  $\pm$  SEM. Statistical analysis was performed using t-test. \*\*  $p \leq 0.05$ ; ns, not significant.

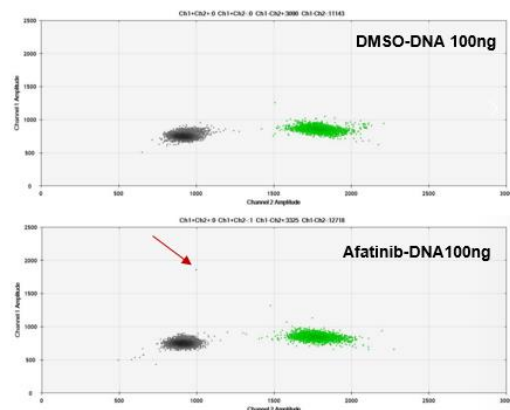
A.



B.



C.



**Figure S2.** Expression of *EGFR* T790M mutation in PDCs. (A) *EGFR* T790M mutation changes in experimental controls. NTC: Negative Template Control; A549: T790M negative cell; H1975: T790M positive cell. (B) *EGFR* T790M mutation changes in PDCs after afatinib treatment. The T790M mutation allele frequency was measured using the ddPCR assay. Red arrow indicate that *EGFR* T790M positive oil-droplet.

**Table S1. Primer sequences for direct sequencing of *EGFR* T790M**

<i>EGFR</i> T790M	F-5'-CCATGAGTACGTATTTTGAAACTC-3' R-5'-CATATCCCCATGGCAAACCTTGC-3'
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**Table S2. Primer sequences for qRT-PCR**

<i>MET</i>	F-5'-TGCACAGTTGGTCCTGCCATGA-3' R-5'-CAGCCATAGGACCGTATTTTCGG-3'
<i>VIMENTIN</i>	F-5'-AGGCAAAGCAGGAGTCCACTGA-3' R-5'-ATCTGGCGTTCCAGGGACTCAT-3'
<i>E-CADHERIN</i>	F-5'-GCCTCCTGAAAAGAGAGTGGAAG-3' R-5'-TGGCAGTGTCTCTCCAAATCCG-3'
<i>GAPDH</i>	F-5'-TGATGACATCAAGAAGGTGG-3' R-5'-TCCTTGGAGGCCATGTGGGC-3'

**Table S3. Biotinylated probe sequences**

Probe label	Sequence
T790M probe 1	5' – biotin – CCA CCG TGC AGC TCA TCA TGC A – 3'
T790M probe 2	5' – GCA AGA GTT TGC CAT GGG GAT ATG – biotin 3'
<i>C-MET</i> probe 1	5' – Biotin-TGCACCCCTTGAAGGAGGGACAAG – 3'
<i>C-MET</i> probe 2	5' – CGAAATCCAAAGTCCCAGCCAC-Biotin – 3'
<i>C-MET</i> probe 3	5' – Biotin-CAGTCAAGGTTGCTGATTTTGGT – 3'
<i>C-MET</i> probe 4	5' – ATAGTATTCTTTATCATACATGT-Biotin – 3'