

Supplemental Table S1

Primer sequences used for targeted deep bisulfite sequencing of selected differentially methylated regions (DMRs). During oligonucleotide synthesis the following tag sequences were added to the 5' end of each forward and reverse primer: CTTGCTTCCTGGCACGAG (forward) and CAGGAAACAGCTATGAC (reverse)

DMR	Primer	Sequence	PCR product location in mm10
247	forward	ATTTTATGGGTTAGTTGTTTGATTT	chr10:99266158-99266419
	reverse	CAACTAATAACACTTTTAACACCC	
422	forward	GTTTGTGGTAATTGGGGATTAGG	chr11:113060998-113061290
	reverse	TCTAAAATACAACCCTACATATAAATC	
513	forward	TTGTTAAATGGAATTGTTGTTGAGA	chr12:85859330-85859634
	reverse	AAAACCTTACATAAACTACCAAAC	
711	forward	TAAAGTAGTGGGATAAATTTTTTTT	chr15:27467984-27468252
	reverse	CTAATCTTCTTATTCTTAACAAATCC	
825	forward	AGATTAGTGTGTTTTAATTATTTGA	chr16:23272009-23272213
	reverse	CCAAACAAAAACATCATACTTTC	
869	forward	TTTTTTGTTTAAGGAAAGGATA	chr16:92620511-92620772
	reverse	CCATTCTCAAAACAAATTTTAC	
929	forward	TTGTAAGGTTGTATTTTTTTTGATGTTT	chr17:44718034-44718321
	reverse	CAACCCTTAAATACTAAAACCTCAACTC	
963	forward	TGGGAGGTAGTGTGGGATATAGTAG	chr17:84141583-84141880
	reverse	CTTCCCAAAAACAAAACACTCTAA	
1144	forward	AGGAGTGTGTTAATTTTTAGGGGTTA	chr2:26501667-26501948
	reverse	CCCAACCAAATAAACCTACCTAA	
1211	forward	ATTTGTTAGTATAGAAGAAGTTGGTAGT	chr2:102873250-102873543
	reverse	AACAAATTCTAAAAAAATTCCTC	
1232	forward	TTTGTGTTAGGTTTTGTTTTTTGTTG	chr2:127336828-127337044
	reverse	ATTCACACCATTACAAATCACAC	
1463	forward	GTTGATTATTAGTTTTTTTTGTAGTT	chr4:119244934-119245233
	reverse	CACATTTACACTAATATCCCAACC	
1602	forward	TAGTAATATAAGATGTTTAAGTATTGAA	chr5:98943301-98943589
	reverse	AAAACCCACAAAACCTCTCTCTAA	
1823	forward	AAAAGTTTTAGAGTGAGTAGAATAGGT	chr7:24370317-24370596
	reverse	CTTACAACCCAAAAACCAAC	
1998	forward	TAATTTTAGTATATGGGGAGTGGGA	chr8:34813921-34814236
	reverse	TAACCATTCCCTTAAAAACACTACC	

Supplemental Table S2

IC50 of trametinib in the parental cells based on averaged dose response curves.

Cell line	IC50 [nM]	Replicates
#1	25.2	2
#2	9.4	2
#3	10.9	3
#4	11.2	3
#5	12.9	2
#6	16.3	3
#7	14.3	3
#8	5.3	2
#9	55.2	3
#10	10.9	3

Supplemental Table S6

Numbers (No.) of evaluated mitosis are displayed (NA, not available).

No._mitosis	Karyotype_cell line #3	Karyotype_cell line #9
1	76	70
2	79	70
3	78	70
4	74	67
5	NA	59
6	NA	70
7	NA	70
8	NA	60
9	NA	73
10	NA	70
11	NA	63
12	NA	70