

Multigene methylation analysis of enriched circulating tumor cells associates with poor progression-free survival in metastatic breast cancer patients

SUPPLEMENTARY MATERIALS

Supplementary Table 1: PCR and pyrosequencing primers

Primer name	5' to 3' sequence	PCR product (bp)	# CpGs
<i>AKR1B1</i> Fw	TGAGTAGGAGAAGGTTTGTATGGTT	172	13
<i>AKR1B1</i> Rev	Biotin-CACCCCAACCCAACCAATCA		
<i>AKR1B1</i> S	AGTAAGGTGAGGTTTTGG		
<i>BMP6</i> Fw	GTAAAGGGGTAAATTTTATGGTGGT	393	11
<i>BMP6</i> Rev	Biotin-CCCTCAATCCTTATCTCTCATAATC		
<i>BMP6</i> S	TTATTTAGTAGTTAGGGAGAG		
<i>CST6</i> Fw	GAGGTAGAATGAGATTAGGGTTAGGT	235	15
<i>CST6</i> Rev	Biotin-CCCCTCCACCTCCTAAACTCCCTA		
<i>CST6</i> S	GTTAGTGTAGTAGGAGTTTTTAGA		
<i>HIST1H3C</i> Fw	AGGAGGTTTGTGAGGTTTAT	147	5
<i>HIST1H3C</i> Rev	Biotin-AAAAAAACCAACAACTTATACCCTT TCCC		
<i>HIST1H3C</i> S	TGAGGTTTATTTGGTGGGATT		
<i>HOXB4</i> Fw	TGTAAAGTTTTAGGGGTGGGAG	145	8
<i>HOXB4</i> Rev	Biotin-TCCCTACCCCAAAACCCCTACA		
<i>HOXB4</i> S	GGGTGGGAGGGGGAA		
<i>ITIH5</i> Fw	TTGAGGGAGAGGAAGAAAGAG	103	5
<i>ITIH5</i> Rev	Biotin-TTGAGGGAGAGGAAGAAAGAG		
<i>ITIH5</i> S	GGAGAGGAAGAAAGAGT		
<i>NEUROD1</i> Fw	AGTAAGGAGTGGGGAGAAGTG	239	12
<i>NEUROD1</i> Rev	Biotin-CCTAAACAATAATAATCTCATAACCCT AAA		
<i>NEUROD1</i> S	ATTAATTGGGTTATATAATTTG		
<i>RASSF1</i> Fw	AGGGAAGGAAGGGTAAGG	268	10
<i>RASSF1</i> Rev	Biotin-CCAACCTCCCCCACTCAATAAACTCA AACT		
<i>RASSF1</i> S	GGATTTTGGGGGAGG		
<i>SOX17</i> Fw	TTTTATAGGGGATATGAAGGTGAAGG	204	15
<i>SOX17</i> Rev	Biotin-AACTCACCCAACATCTTACT		
<i>SOX17</i> S	ATATGAAGGTGAAGGG		

Fw forward, Rev Reverse, S Sequencing.

Supplementary Table 2: Summary of methylation results of all nine genes and CTC count in each patient (N=37)

See Supplementary File 1