

**Supplementary Table S4.** Comparison of methylation patterns in the normal and the cancer group WGBS samples.

	P-value x561	Positive in normal group	Positive in cancer group
<b>GSTP1.T16.T17</b>	.00000000000000024 <sup>a</sup>	54.0% (27 of 50)	4.6% (10 of 219)
<b>GSTP1.T14.T15</b>	.0000000000000014 <sup>a</sup>	50.0% (24 of 48)	3.6% (8 of 220)
<b>GSTP1.T14.T16</b>	.0000000000000016 <sup>a</sup>	47.8% (22 of 46)	2.6% (5 of 193)
<b>GSTP1.T12.T13</b>	.0000000000000017 <sup>a</sup>	49.1% (27 of 55)	4.8% (11 of 229)
<b>GSTP1.C16</b>	.0000000000000065 <sup>a</sup>	46.2% (24 of 52)	93.6% (205 of 219)
<b>GSTP1.T15.T16</b>	.0000000000000093 <sup>a</sup>	48.9% (23 of 47)	3.6% (7 of 196)
<b>GSTP1.T11.T13</b>	.0000000000000016 <sup>a</sup>	49.0% (25 of 51)	4.9% (11 of 223)
<b>GSTP1.T14.T17</b>	.0000000000000022 <sup>a</sup>	47.7% (21 of 44)	3.1% (6 of 193)
<b>GSTP1.T11.T12</b>	.0000000000000048 <sup>a</sup>	49.0% (25 of 51)	5.6% (13 of 234)
<b>GSTP1.T12.T14</b>	.0000000000000036 <sup>a</sup>	45.5% (20 of 44)	1.4% (2 of 148)
<b>GSTP1.T13.T15</b>	.0000000000000047 <sup>a</sup>	46.7% (21 of 45)	2.7% (4 of 149)
<b>GSTP1.T9.T13</b>	.000000000018 <sup>a</sup>	52.3% (23 of 44)	6.6% (12 of 182)
<b>GSTP1.T13.T14</b>	.000000000029 <sup>a</sup>	46.7% (21 of 45)	3.8% (6 of 158)
<b>GSTP1.C11</b>	.000000000053 <sup>a</sup>	52.8% (28 of 53)	92.3% (227 of 246)
<b>GSTP1.T9.T11</b>	.000000000086 <sup>a</sup>	50.0% (23 of 46)	7.3% (15 of 205)
<b>GSTP1.T10.T13</b>	.000000000010 <sup>a</sup>	49.0% (24 of 49)	6.8% (13 of 190)
<b>GSTP1.T7.T13</b>	.000000000012 <sup>a</sup>	56.1% (23 of 41)	7.3% (11 of 151)
<b>GSTP1.T10.T11</b>	.000000000013 <sup>a</sup>	47.1% (24 of 51)	7.0% (15 of 213)
<b>GSTP1.C12</b>	.000000000017 <sup>a</sup>	50.9% (28 of 55)	90.8% (218 of 240)
<b>GSTP1.T13.T16</b>	.000000000023 <sup>a</sup>	44.2% (19 of 43)	1.6% (2 of 122)
<b>GSTP1.T11.T14</b>	.000000000029 <sup>b</sup>	45.0% (18 of 40)	1.4% (2 of 142)
<b>GSTP1.T9.T12</b>	.000000000035 <sup>a</sup>	52.3% (23 of 44)	8.3% (16 of 193)
<b>GSTP1.T8.T13</b>	.000000000052 <sup>a</sup>	54.8% (23 of 42)	7.8% (12 of 154)
<b>GSTP1.T10.T12</b>	.000000000056 <sup>a</sup>	49.0% (24 of 49)	8.0% (16 of 201)
<b>GSTP1.T11.T15</b>	.000000000075 <sup>b</sup>	45.0% (18 of 40)	1.5% (2 of 133)
<b>GSTP1.C14</b>	.0000000020 <sup>a</sup>	50.0% (24 of 48)	90.4% (207 of 229)
<b>GSTP1.T12.T15</b>	.0000000029 <sup>a</sup>	45.5% (20 of 44)	4.3% (6 of 139)
<b>GSTP1.T7.T11</b>	.0000000032 <sup>a</sup>	53.5% (23 of 43)	9.2% (16 of 174)
<b>GSTP1.T7.T12</b>	.0000000048 <sup>a</sup>	56.1% (23 of 41)	9.9% (16 of 162)
<b>GSTP1.T12.T16</b>	.0000000050 <sup>a</sup>	42.9% (18 of 42)	1.8% (2 of 112)
<b>GSTP1.C11.C12</b>	.0000000066 <sup>a</sup>	51.0% (26 of 51)	89.7% (210 of 234)
<b>GSTP1.T6.T11</b>	.0000000079 <sup>a</sup>	64.3% (18 of 28)	10.3% (15 of 146)
<b>GSTP1.T6.T13</b>	.0000000088 <sup>b</sup>	69.2% (18 of 26)	8.1% (10 of 123)
<b>GSTP1.T6.T12</b>	.000000020 <sup>a</sup>	69.2% (18 of 26)	11.9% (16 of 134)
<b>GSTP1.T8.T11</b>	.000000029 <sup>a</sup>	52.3% (23 of 44)	10.2% (18 of 177)
<b>GSTP1.T9.T14</b>	.000000037 <sup>b</sup>	48.5% (16 of 33)	2.0% (2 of 101)
<b>GSTP1.T8.T12</b>	.000000044 <sup>a</sup>	54.8% (23 of 42)	10.9% (18 of 165)
<b>GSTP1.T13.T17</b>	.000000070 <sup>a</sup>	43.9% (18 of 41)	4.1% (5 of 122)
<b>GSTP1.C14.C16</b>	.000000074 <sup>a</sup>	52.2% (24 of 46)	90.7% (175 of 193)
<b>GSTP1.T11.T16</b>	.00000019 <sup>b</sup>	42.1% (16 of 38)	1.9% (2 of 106)
<b>GSTP1.C11.C14</b>	.0000032 <sup>a</sup>	55.0% (22 of 40)	93.7% (133 of 142)
<b>GSTP1.T6.T14</b>	.0000042 <sup>b</sup>	73.3% (11 of 15)	0% (0 of 42)
<b>GSTP1.T11.T17</b>	.0000044 <sup>b</sup>	41.7% (15 of 36)	1.9% (2 of 106)
<b>GSTP1.T8.T14</b>	.0000052 <sup>a</sup>	51.6% (16 of 31)	2.7% (2 of 73)
<b>GSTP1.T7.T14</b>	.0000054 <sup>a</sup>	53.3% (16 of 30)	2.9% (2 of 70)

<b>GSTP1.T10.T14</b>	.0000063 <sup>a</sup>	44.7% (17 of 38)	4.6% (5 of 109)
<b>GSTP1.T15.T17</b>	.0000074 <sup>a</sup>	48.9% (22 of 45)	11.2% (22 of 196)
<b>GSTP1.C11.C16</b>	.000013 <sup>a</sup>	57.9% (22 of 38)	96.2% (102 of 106)
<b>GSTP1.C13</b>	.000018 <sup>a</sup>	50.0% (28 of 56)	84.9% (203 of 239)
<b>GSTP1.T7.T8</b>	.000024 <sup>a</sup>	50.0% (28 of 56)	14.8% (32 of 216)
<b>GSTP1.C13.C14</b>	.000041 <sup>a</sup>	53.3% (24 of 45)	89.9% (142 of 158)
<b>GSTP1.T5.T13</b>	.000044 <sup>b</sup>	66.7% (14 of 21)	9.1% (9 of 99)
<b>GSTP1.T12.T17</b>	.000044 <sup>a</sup>	42.5% (17 of 40)	5.4% (6 of 112)
<b>GSTP1.T9.T10</b>	.000054 <sup>a</sup>	47.3% (26 of 55)	13.9% (32 of 230)
<b>GSTP1.T7.T10</b>	.000061 <sup>a</sup>	50.0% (26 of 52)	14.6% (29 of 199)
<b>GSTP1.C13.C16</b>	.000067 <sup>a</sup>	55.8% (24 of 43)	92.6% (113 of 122)
<b>GSTP1.C12.C16</b>	.000090 <sup>a</sup>	57.1% (24 of 42)	93.8% (105 of 112)
<b>GSTP1.T7.T9</b>	.000094 <sup>a</sup>	50.9% (27 of 53)	15.8% (32 of 203)
<b>GSTP1.T10.T15</b>	.00011 <sup>a</sup>	44.7% (17 of 38)	6.0% (6 of 100)
<b>GSTP1.C17</b>	.00013 <sup>a</sup>	44.2% (23 of 52)	80.4% (181 of 225)
<b>GSTP1.C12.C14</b>	.00019 <sup>a</sup>	54.5% (24 of 44)	89.9% (133 of 148)
<b>GSTP1.T5.T12</b>	.00019 <sup>b</sup>	66.7% (14 of 21)	11.3% (12 of 106)
<b>GSTP1.T8.T9</b>	.00020 <sup>a</sup>	50.0% (27 of 54)	16.0% (33 of 206)
<b>GSTP1.T6.T8</b>	.00032 <sup>a</sup>	56.1% (23 of 41)	17.6% (33 of 188)
<b>GSTP1.T10.T16</b>	.00034 <sup>a</sup>	41.7% (15 of 36)	2.7% (2 of 73)
<b>GSTP1.T8.T10</b>	.00042 <sup>a</sup>	49.1% (26 of 53)	15.8% (32 of 202)
<b>GSTP1.C8</b>	.00045 <sup>a</sup>	50.9% (29 of 57)	83.1% (182 of 219)
<b>GSTP1.T6.T10</b>	.00047 <sup>a</sup>	56.8% (21 of 37)	17.0% (29 of 171)
<b>GSTP1.T6.T9</b>	.00059 <sup>a</sup>	57.9% (22 of 38)	18.3% (32 of 175)
<b>GSTP1.T9.T16</b>	.00059 <sup>a</sup>	45.2% (14 of 31)	3.1% (2 of 65)
<b>GSTP1.T3.T4</b>	.00073 <sup>a</sup>	50.0% (21 of 42)	15.2% (32 of 210)
<b>GSTP1.T4.T5</b>	.00076 <sup>a</sup>	55.0% (22 of 40)	17.6% (34 of 193)
<b>GSTP1.C11.C13</b>	.00086 <sup>a</sup>	51.0% (26 of 51)	83.4% (186 of 223)
<b>GSTP1.C5</b>	.00098 <sup>a</sup>	44.2% (19 of 43)	80.4% (176 of 219)
<b>GSTP1.C6.C12</b>	.0012 <sup>a</sup>	30.8% (8 of 26)	79.1% (106 of 134)
<b>GSTP1.C16.C17</b>	.0013 <sup>a</sup>	46.0% (23 of 50)	79.9% (175 of 219)
<b>GSTP1.T5.T8</b>	.0013 <sup>a</sup>	52.8% (19 of 36)	15.0% (24 of 160)
<b>GSTP1.T9.T15</b>	.0013 <sup>a</sup>	48.5% (16 of 33)	8.7% (8 of 92)
<b>GSTP1.T5.T9*</b>	.0014 <sup>a</sup>	54.5% (18 of 33)	15.0% (22 of 147)
<b>GSTP1.T5.T11</b>	.0017 <sup>b</sup>	60.9% (14 of 23)	12.7% (15 of 118)
<b>GSTP1.C15</b>	.0019 <sup>a</sup>	49.0% (24 of 49)	81.6% (182 of 223)
<b>GSTP1.T5.T6</b>	.0020 <sup>a</sup>	52.5% (21 of 40)	17.2% (35 of 203)
<b>GSTP1.C7.C12</b>	.0025 <sup>a</sup>	43.9% (18 of 41)	80.9% (131 of 162)
<b>GSTP1.C7.C8</b>	.0026 <sup>a</sup>	50.0% (28 of 56)	81.0% (175 of 216)
<b>GSTP1.C8.C12</b>	.0031 <sup>a</sup>	45.2% (19 of 42)	81.2% (134 of 165)
<b>GSTP1.T2.T3</b>	.0034 <sup>a</sup>	48.8% (21 of 43)	16.3% (35 of 215)
<b>GSTP1.T4.T13</b>	.0038 <sup>b</sup>	66.7% (12 of 18)	12.0% (9 of 75)
<b>GSTP1.T2.T4</b>	.0040 <sup>a</sup>	48.8% (20 of 41)	15.5% (29 of 187)
<b>GSTP1.T6.T7</b>	.0044 <sup>a</sup>	53.5% (23 of 43)	19.6% (42 of 214)
<b>GSTP1.C6.C8</b>	.0055 <sup>a</sup>	43.9% (18 of 41)	79.3% (149 of 188)
<b>GSTP1.C12.C13</b>	.0055 <sup>a</sup>	50.9% (28 of 55)	80.8% (185 of 229)
<b>GSTP1.C12.C15</b>	.0056 <sup>a</sup>	54.5% (24 of 44)	87.1% (121 of 139)
<b>GSTP1.C6.C11</b>	.0058 <sup>a</sup>	35.7% (10 of 28)	78.8% (115 of 146)
<b>GSTP1.C8.C11</b>	.0062 <sup>a</sup>	47.7% (21 of 44)	81.4% (144 of 177)
<b>GSTP1.C2</b>	.0062 <sup>a</sup>	48.8% (21 of 43)	81.4% (180 of 221)

<b>GSTP1.C7</b>	.0063 <sup>a</sup>	50.0% (29 of 58)	79.3% (192 of 242)
<b>GSTP1.C10</b>	.0064 <sup>a</sup>	53.3% (32 of 60)	81.5% (194 of 238)
<b>GSTP1.T5.T7</b>	.0064 <sup>a</sup>	50.0% (19 of 38)	16.1% (30 of 186)
<b>GSTP1.T4.T12</b>	.0080 <sup>b</sup>	66.7% (12 of 18)	13.8% (11 of 80)
<b>GSTP1.C7.C11</b>	.0081 <sup>a</sup>	46.5% (20 of 43)	80.5% (140 of 174)
<b>GSTP1.T8.T15</b>	.0089 <sup>a</sup>	51.6% (16 of 31)	9.4% (6 of 64)
<b>GSTP1.T5.T10</b>	.011 <sup>a</sup>	53.1% (17 of 32)	16.1% (23 of 143)
<b>GSTP1.C10.C12</b>	.011 <sup>a</sup>	49.0% (24 of 49)	80.1% (161 of 201)
<b>GSTP1.C5.C12</b>	.012 <sup>a</sup>	33.3% (7 of 21)	81.1% (86 of 106)
<b>GSTP1.T5.T14</b>	.013 <sup>b</sup>	70.0% (7 of 10)	0% (0 of 24)
<b>GSTP1.C11.C15</b>	.014 <sup>a</sup>	55.0% (22 of 40)	87.2% (116 of 133)
<b>GSTP1.C6.C9</b>	.015 <sup>a</sup>	42.1% (16 of 38)	77.7% (136 of 175)
<b>GSTP1.T4.T8</b>	.017 <sup>a</sup>	51.5% (17 of 33)	15.7% (21 of 134)
<b>GSTP1.C9*</b>	.017 <sup>a</sup>	51.8% (29 of 56)	79.9% (187 of 234)
<b>GSTP1.T3.T5</b>	.020 <sup>a</sup>	52.6% (20 of 38)	19.3% (36 of 187)
<b>GSTP1.C6</b>	.022 <sup>a</sup>	44.4% (20 of 45)	76.2% (176 of 231)
<b>GSTP1.T7.T15</b>	.027 <sup>a</sup>	53.3% (16 of 30)	11.5% (7 of 61)
<b>GSTP1.C10.C11</b>	.029 <sup>a</sup>	51.0% (26 of 51)	79.8% (170 of 213)
<b>GSTP1.T3.T13</b>	.030 <sup>b</sup>	62.5% (10 of 16)	11.4% (8 of 70)
<b>GSTP1.T6.T15</b>	.030 <sup>b</sup>	73.3% (11 of 15)	12.1% (4 of 33)
<b>GSTP1.T2.T5</b>	.033 <sup>a</sup>	51.4% (19 of 37)	18.3% (30 of 164)
<b>GSTP1.C6.C7</b>	.034 <sup>a</sup>	41.9% (18 of 43)	74.3% (159 of 214)
<b>GSTP1.C9.C12</b>	.036 <sup>a</sup>	47.7% (21 of 44)	78.8% (152 of 193)
<b>GSTP1.C7.C9</b>	.039 <sup>a</sup>	49.1% (26 of 53)	77.8% (158 of 203)
<b>GSTP1.T4.T7</b>	.043 <sup>a</sup>	48.6% (17 of 35)	16.2% (26 of 160)
<b>GSTP1.C8.C9</b>	.045 <sup>a</sup>	50.0% (27 of 54)	78.2% (161 of 206)

<sup>a</sup> Chi-square test <sup>b</sup> Exact Fisher test \* The corresponding difference was found to be statistically significant in the comparison of PCa patients and the group of HD and BPH.