

Table 3. Hypermethylated regions on chromosome 8p in lung squamous cell carcinoma

| | Lung squamous cell carcinoma #1 | | |
|----|---------------------------------|-------------|---------------------|
| | Stage I | | |
| | Genome location | Gene symbol | CpG type / location |
| 1 | Chr8:4835989-4837638 | CSMD1 | CGI (promoter) |
| 2 | Chr8:11575055-11576776 | GATA4 | CGI (promoter) |
| 3 | Chr8:18288238-18289521 | NAT2 | CGI (promoter) |
| 4 | Chr8:21960744-21961726 | FGF17 | CGI (intragenic) |
| 5 | Chr8:22051937-22053186 | REEP4 | CGI (intragenic) |
| 6 | Chr8:22494950-22495299 | PDLIM2 | CGI (intragenic) |
| 7 | Chr8:24827148-24828797 | NEFM | CGI (promoter) |
| 8 | Chr8:24868516-24869816 | NEFL | CGI (promoter) |
| 9 | Chr8:25956098-25958848 | EBF2 | CGI (promoter) |
| 10 | Chr8:25960960-25962060 | EBF2 | CGI (promoter) |
| 11 | Chr8:26777671-26_779237 | ADRA1 | CGI (promoter) |
| 12 | Chr8:26192344-26193593 | PPP2R2A | CGI (intragenic) |
| 13 | Chr8:35211737-35213286 | UNC5D | CGI (promoter) |
| 14 | Chr8:36763459-36764208 | BC0287701 | CGI (intragenic) |
| 15 | Chr8:37677117-37678992 | ZNF703 | CGI (intragenic) |
| 16 | Chr8:41543396-41545120 | N/A | CGI (Intergenic) |

| | Lung squamous cell carcinoma #2 | | |
|----|---------------------------------|-----------|---------------------|
| | Stage II | | |
| | Genome location | Gene | CpG type / location |
| 1 | Chr8:615015-616864 | ERICH1 | CGI (promoter) |
| 2 | Chr8:4759834-4761320 | CSMD1 | CGI (intragenic) |
| 3 | Chr8:4836289-4840074 | CSMD1 | CGI (promoter) |
| 4 | Chr8:6217346-6219095 | N/A | CGI (intergenic) |
| 5 | Chr8:9797852-9801858 | N/A | CGI (intergenic) |
| 6 | Chr8:11574306-11576776 | GATA4 | CGI (promoter) |
| 7 | Chr8:13033732-13034981 | DLC1 | CGI (promoter) |
| 8 | Chr8:17702544-17703493 | MTUS1 | CGI (promoter) |
| 9 | Chr8:21599811-21601928 | GFRA2 | CGI (intragenic) |
| 10 | Chr8:23617955-23620733 | N/A | CGI (intergenic) |
| 11 | Chr8:26777279-26779628 | ADRA1 | CGI (promoter) |
| 12 | Chr8:28613835-28615841 | EXTL3 | CGI (promoter) |
| 13 | Chr8:30787832-30790084 | PPP2CB | CGI (promoter) |
| 14 | Chr8:35211937-35214616 | UNC5D | CGI (promoter) |
| 15 | Chr8:37672180-37676766 | ZNF703 | CGI (intragenic) |
| 16 | Chr8:37875678-37876368 | RAB11FIP1 | CGI (promoter) |
| 17 | Chr8:38876610-38878801 | AF286164 | CGI (promoter) |
| 18 | Chr8:40873947-40874696 | ZMAT4 | CGI (promoter) |
| 19 | Chr8:43114818-43115585 | FLJ3273 | CGI (promoter) |

| | Lung squamous cell carcinoma #3 | | |
|----|---------------------------------|----------|---------------------|
| | Stage III | | |
| | Genome location | Gene | CpG type / location |
| 1 | Chr8:830303-831152 | BC08783 | CGI (intragenic) |
| 2 | Chr8:1832535-1834184 | ARHGEF10 | CGI (intragenic) |
| 3 | Chr8:4838851-4840074 | CSMD1 | CGI (promoter) |
| 4 | Chr8:6217446-6219095 | N/A | CGI (intergenic) |
| 5 | Chr8:9799604-9800153 | SWAW | CGI (promoter) |
| 6 | Chr8:11599647-11600696 | GATA4 | CGI (promoter) |
| 7 | Chr8:17148431-17149203 | VPS37A | CGI (promoter) |
| 8 | Chr8:17445124-17445673 | SLC7A2 | CGI (intergenic) |
| 9 | Chr8:17702944-17703593 | MTUS1 | CGI (promoter) |
| 10 | Chr8:21701275-21702424 | GFRA2 | CGI (promoter) |
| 11 | Chr8:23617855-23620730 | N/A | CGI (intergenic) |
| 12 | Chr8:25955098-25957047 | EBF2 | CGI (intragenic) |
| 13 | Chr8:26777379-26778628 | ADRA1 | CGI (promoter) |
| 14 | Chr8:40719785-40720934 | ZMAT4 | CGI (intragenic) |
| 15 | Chr8:41284732-41285332 | SFRP1 | CGI (promoter) |
| 16 | Chr8:41743716-41744508 | ANK1 | CGI (intragenic) |
| 17 | Chr8:43114818-43115685 | FLJ3273 | CGI (promoter) |

The definition of a CpG island was according to the UCSC genome browser: GC content of 50% or greater, length more than 200 bp, and a ratio >0.6 of observed number of CpG dinucleotides to the expected number on the basis of the number of Gs and Cs in the segment. CpG-rich regions have a ratio of observed/expected CpGs of 0.3-0.6.

Promoter, overlapping any first exon/transcription start site (TSS) of a gene.

Intragenic, from TSS to the end of the gene boundary excluding those overlapping with first exon/TSS.

Intergenic; located between genes.

CGI, CpG island; CGr, CpG-rich region.