**Supplementary Table 2.** 48 candidate regions were identified in the data reduction step of the analysis (described in Supplementary Figure 1). Subsequently, five regions were identified as having a statistically-significant association with percent density in MBCFSa

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Chromosome | Start Position | End Position | # Probes passing the data reduction step (Supplementary Figure 1) | # significant probes from permutation testing |
| 1 | 246817063 | 246861733 | 16 | 0 |
| 2 | 56507917 | 56509045 | 17 | 0 |
| 2 | 106059574 | 106062279 | 16 | 0 |
| 2 | 146579364 | 146593351 | 17 | 0 |
| 2 | 180122079 | 180124180 | 19 | 0 |
| 2 | 180124789 | 180131428 | 21 | 0 |
| 3 | 53003023 | 53013826 | 16 | 0 |
| **3** | **163995377** | **164008284** | **17** | **17** |
| **3** | **164030569** | **164108060** | **13** | **13** |
| 4 | 186678853 | 186681017 | 17 | 0 |
| 4 | 187330534 | 187337378 | 20 | 0 |
| 5 | 151495149 | 151498778 | 16 | 0 |
| 6 | 19150071 | 19157236 | 15 | 0 |
| 6 | 32627136 | 32630367 | 13 | 0 |
| 6 | 32630424 | 32658356 | 45 | 0 |
| 6 | 32658408 | 32668305 | 8 | 0 |
| 6 | 67098386 | 67099813 | 12 | 0 |
|  |  |  |  |  |
| 6 | 103852259 | 103894820 | 18 | 0 |
| 6 | 114330763 | 114331668 | 14 | 0 |
| 6 | 126225113 | 126228337 | 17 | 0 |
| 6 | 152431765 | 152434254 | 18 | 0 |
| 6 | 165644729 | 165651913 | 18 | 0 |
| 7 | 93158476 | 93177711 | 23 | 0 |
| 8 | 120225195 | 120229949 | 16 | 0 |
| **8** | **133134063** | **133144009** | **6** | **6** |
| 8 | 144705480 | 144707338 | 17 | 0 |
| 10 | 95535526 | 95538433 | 11 | 0 |
| **11** | **11779614** | **11780713** | **17** | **17** |
| 11 | 11832323 | 11834906 | 10 | 0 |
| 11 | 55127597 | 55209499 | 37 | 0 |
| 12 | 15910153 | 15927659 | 18 | 0 |
| 12 | 33606133 | 33608065 | 18 | 0 |
| 12 | 56298500 | 56366092 | 22 | 0 |
| 12 | 68573476 | 68576901 | 15 | 1 |
| 12 | 70472924 | 70476715 | 18 | 0 |
| 12 | 89012380 | 89015833 | 17 | 0 |
| 13 | 98052451 | 98055147 | 18 | 0 |
| 13 | 107745089 | 107749787 | 18 | 0 |
| 16 | 1363034 | 1364059 | 14 | 0 |
| 17 | 11352423 | 11353031 | 11 | 0 |
| 17 | 45173820 | 45247229 | 18 | 0 |
| **17** | **47649105** | **47667700** | **8** | **3** |
| 18 | 56823235 | 56823680 | 6 | 0 |
| 19 | 61558394 | 61560857 | 17 | 0 |
| 20 | 1509224 | 1542273 | 14 | 0 |
| 21 | 23272470 | 23432532 | 58 | 0 |
| 22 | 32110897 | 32112594 | 17 | 0 |
| Total |  |  | 829 | 57 |

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The number of probes within each initial region are obtained via the “Data Reduction and Analysis” step (Supplementary Figure 1). The significant by permutation testing are obtained via “Permutation Testing and Define Significance” (supplementary Figure 1).