



### Supplementary Figure 1

Volcano plot for each autosome with the difference of average of DNA methylation level in x-axis and the  $P$  value ( $-\log_{10}P$ ) obtained by glm analysis in y-axis. Each color shows dot density ( $100 < n$ ,  $80 < n \leq 100$ ,  $60 < n \leq 80$ ,  $40 < n \leq 60$ ,  $20 < n \leq 40$ ,  $10 < n \leq 20$  and  $n \leq 10$  per unit area ( $0.002 \times 1$  for x and y-axis, respectively) are depicted by red, yellow, green, sky blue, blue, pink and black, respectively).