



Figure S1 Comparison between Original and New probes for B73 and Mo17. (A) New (N) probes were designed to fit in-between Original (O) probes, and around the DMR. (B-G) Correlation between Original and New probes for inbred lines B73 and Mo17. The red line represents $y=x$. The correlation coefficient was shown on the top of each plot. Shown here are the 3 biological replicates of each inbred line. From these figures, we can see that the original probes and the new probes show high consistency of DNA methylation measurement. (H-I) Distribution of standard deviation across 3 biological replicates of B73 (H) or Mo17 (I) when the methylation level of each DMR was calculated using Original probes, or New probes or both types of probes within the DMR. From (H) and (I), we can see that variances between replicates of both B73 and Mo17 were slightly reduced when using the combined set of probes. Therefore, we used the average of both new and original probes to represent methylation level in this study.