

Supporting Information

He and Dooner 10.1073/pnas.0902972106

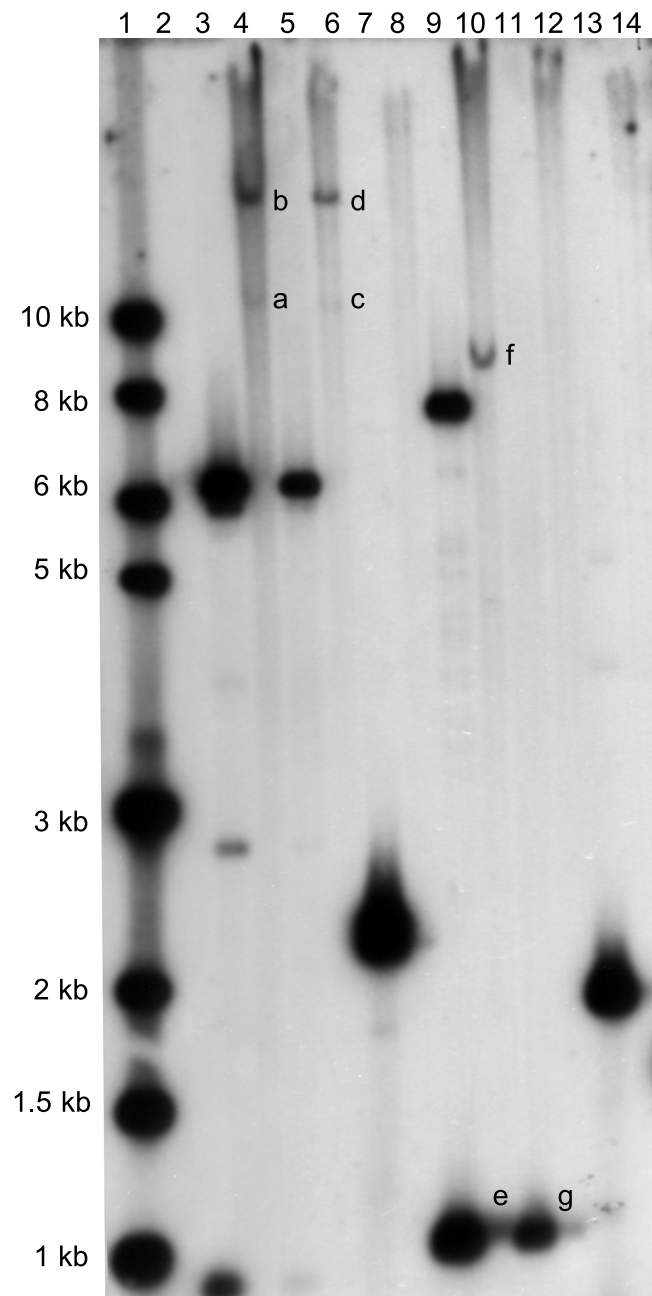


Fig. S1. Methylation analysis with methylation sensitive restriction enzymes PvuII and PstI. DNA digestion: 37 °C for >3 h. Electrophoresis: 0.8% agarose in TAE buffer. Probe: *znf 3'* adjacent segment (83070–84380 in Ac7077). PvuII and PstI sites are methylated in *Grande1* of B73 and Ac7077. Interpretation of bands: b and d, from completely methylated PvuII sites in *Grande1*; a and c, from partially methylated PvuII sites; e and g, from unmethylated distal PstI sites in the *znf-Grande1* intergenic region; f, from unmethylated PstI sites in *hypro1* and the *znf-Grande1* intergenic region which flank a methylated site in the *hypro1-znf* intergenic region of B73. Lanes: 1, 1-kb ladder; 2, Blank; 3, B73 BAC/PvuII digest; 4, B73 gDNA/PvuII digest; 5, Ac7077 BAC/PvuII digest; 6, Ac7077 gDNA/PvuII digest; 7, W22 BAC/PvuII digest; 8, W22 gDNA/PvuII digest; 9, B73 BAC/PstI digest; 10, B73 gDNA/PstI digest; 11, Ac7077 BAC/PstI digest; 12, Ac7077 gDNA/PstI digest; 13, W22 BAC/PstI digest; 14, W22 gDNA/PstI digest.

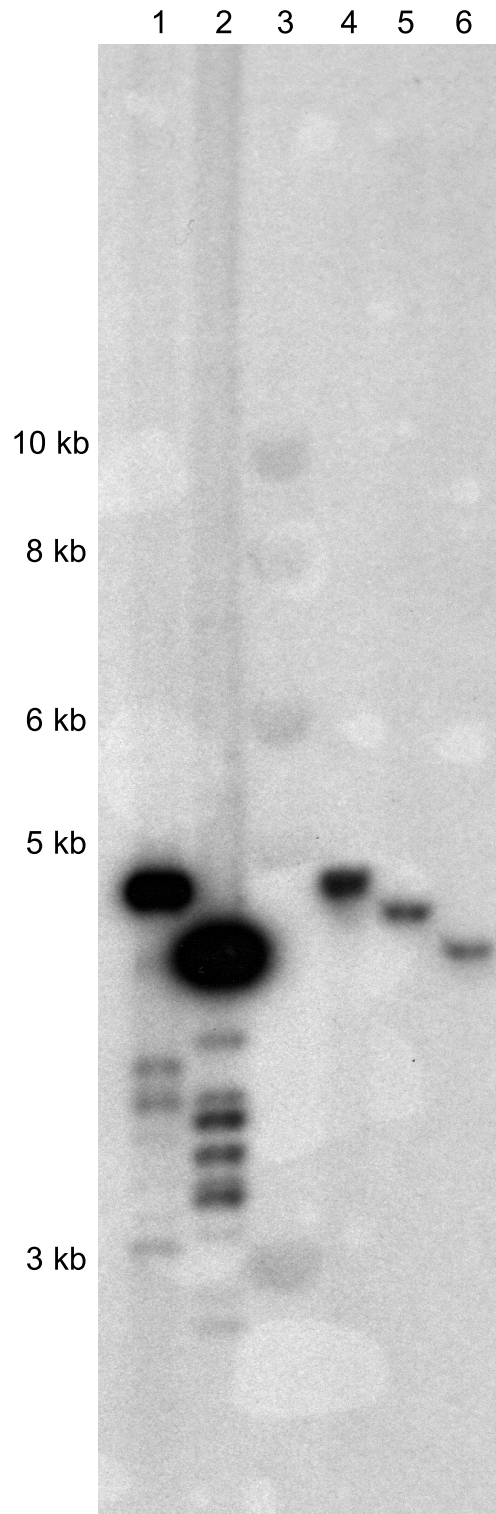


Fig. S2. Methylation analysis with methylation-sensitive restriction enzyme PstI. DNA digestion: 37 °C for >3 h. Electrophoresis: 0.8% agarose in TAE buffer. Probe: *stc1* 5' gene segment (3416-6390 in Ac7077). PstI sites are not methylated in the *stc1* gene of any haplotype. Lanes: 1, B73 BAC/PstI digest; 2, Ac7077 BAC/PstI digest; 3, 1-kb ladder; 4, B73 gDNA/PstI digest; 5, Ac7077 gDNA/PstI digest; 6, W22 gDNA/PstI digest.

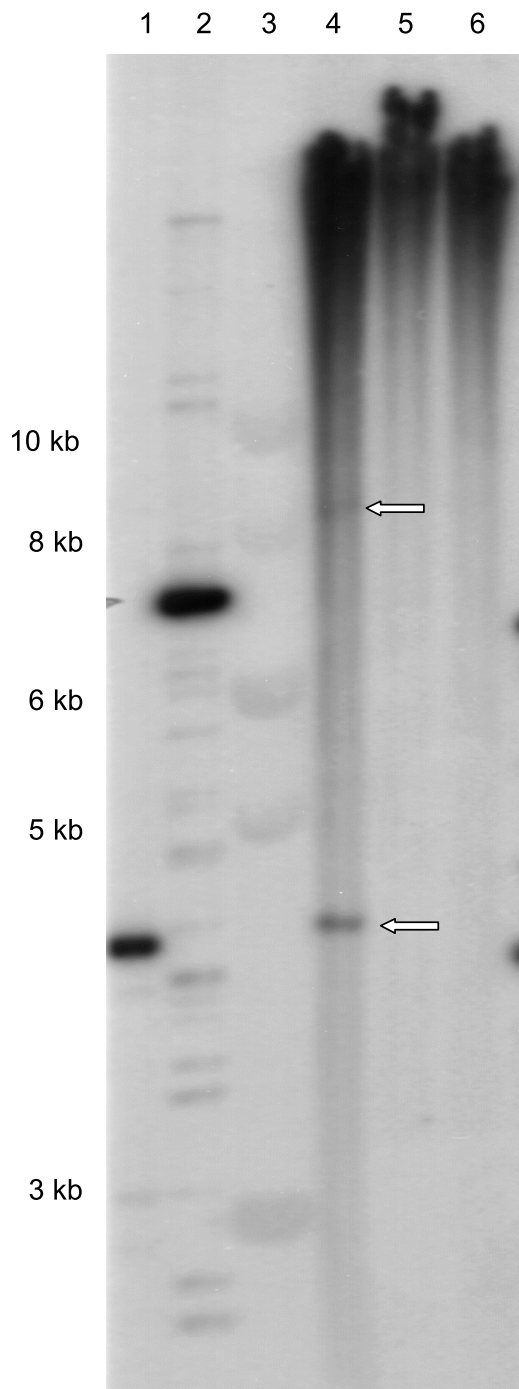


Fig. S3. Methylation analysis with methylation-sensitive restriction enzyme PstI. DNA digestion: 37 °C for >3 h. Electrophoresis: 0.8% agarose in TAE buffer. Probe: *hypro1* gene segment (13160-13980 in Ac7077). The PstI sites in *hypro1* and in *HeIA* are heavily methylated. Interpretation of bands in B73. Lower arrow: proximal fragment (4.3 kb) in B73 gDNA, from unmethylated PstI sites in the *stc1-rpl35A* intergenic region and *hypro1*; upper arrow: distal fragment (8.4 kb) from unmethylated sites in *hypro1* and the *znf-Grande1* intergenic region that flank a methylated PstI site in the *hypro1* 5' UTR. The absence of bands in Ac7077 and W22 gDNA indicates that the PstI sites in *hypro1* and in *HeIA* are methylated. Lanes: 1, B73 BAC/PstI digest; 2, Ac7077 BAC/PstI digest; 3, 1-kb ladder; 4, B73 gDNA/PstI digest; 5, Ac7077 gDNA/PstI digest; 6, W22 gDNA/PstI digest.

Other Supporting Information Files

[Table S1 \(PDF\)](#)

[Table S2 \(PDF\)](#)

[Table S3 \(PDF\)](#)