



Figure S1 Combining BSR-seq and exome-seq to identify the 25-bp causative deletion in mutant 1039-o2. (A) Full size vitreous/opaque kernels in 1039-o2 x Mo17 F2 segregating ears were imaged on a light box. (B) SDS-PAGE for zein (left) and non-zein (right) in a comparison of normal type (N) and mutant type (M). (C) Chromosomal plot of linkage peaks from BSR-seq and exon-deletions by exome-seq. Orange bars: SNP/indel density; red bars: numbers of positive SNPs/indels in sliding-windows of 100 Kb with a step of 10 Kb; blue bars: unique deleted exons by detected exome-seq; one brown bar: the causative deletion in o2 gene; black bars: the physical positions of centromeres (Wolfruber et al. 2009). Y axis scale for positive SNPs/indels ranges from 0 to 16. (D) The causative deletion (black line), in a comparison of B73 and mutant 1039-o2, is 25-bp length with a T allele on the right end, known as o2T. The genomic coordinates were shown within exon #4 of O2 gene in exome-seq. The consensus sequences are shown in the bottom. Grey bars are for the mapped reads.