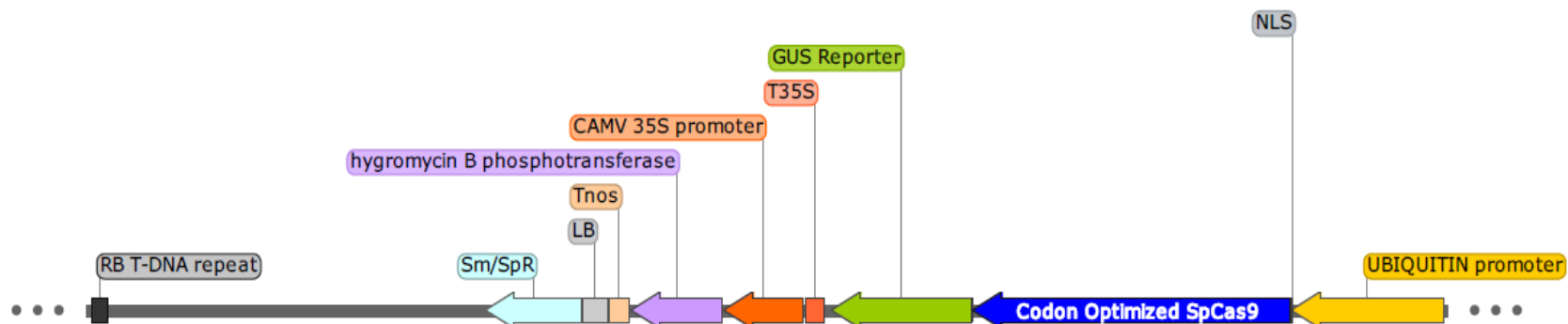


Supplementary Material

A



B

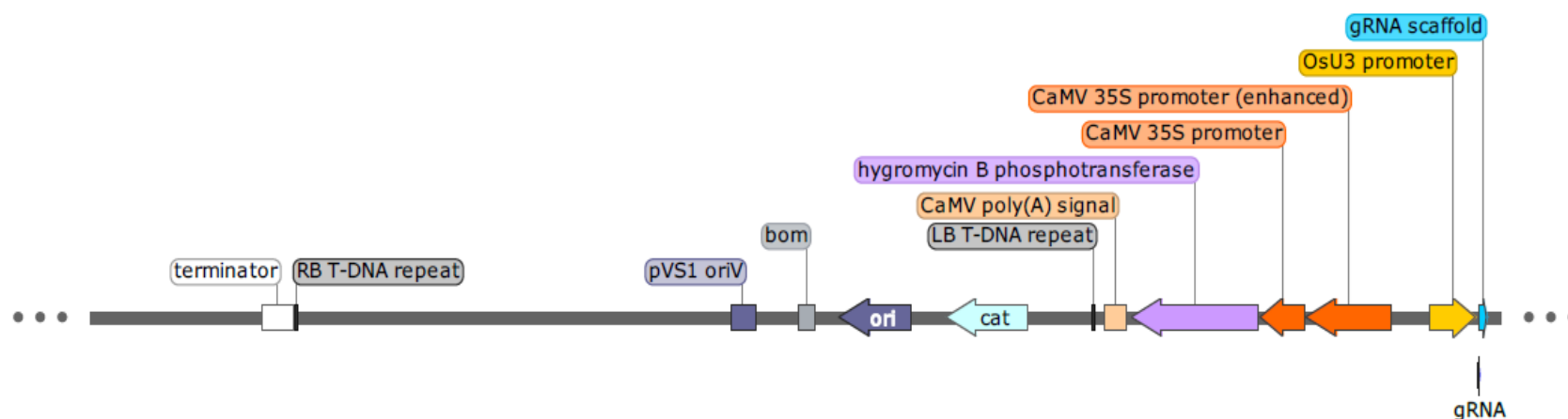


Figure S1. Scheme of binary plasmids for CRISPR/Cas9 gene editing. **(A)** pUbil-Cas9 plasmid containing codon optimized *SpCas9* fused to nuclear localization signal SV40 (NLS) and β -glucuronidase (*GUS*) reporter gene and expression driven by *ubiquitin* promoter. **(B)** Expression of single guide RNA (gRNA) for *EgPDS* and *EgBRI1* target sites driven by *OsU3* promoter from *Oryza sativa* and fused to the gRNA scaffold cassette. Both plasmids carry the *hygromycin B phosphotransferase* gene as selection marker under the control of constitutive cauliflower mosaic virus 35S (CaMV 35S) promoter. LB, left border; RB, right border

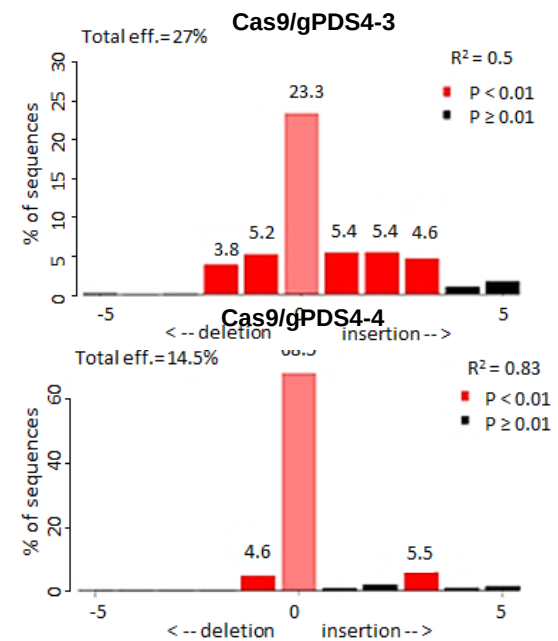
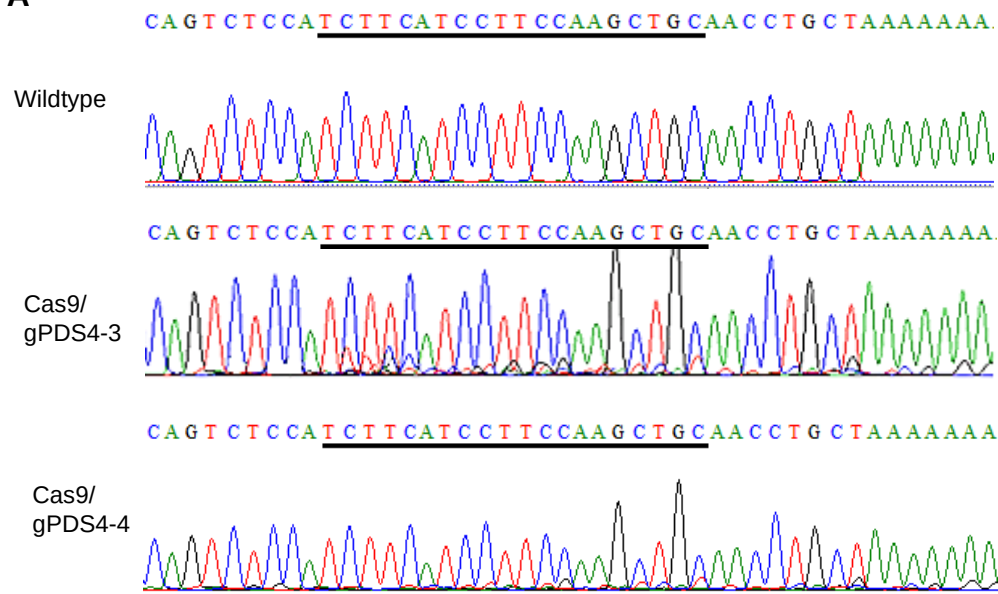
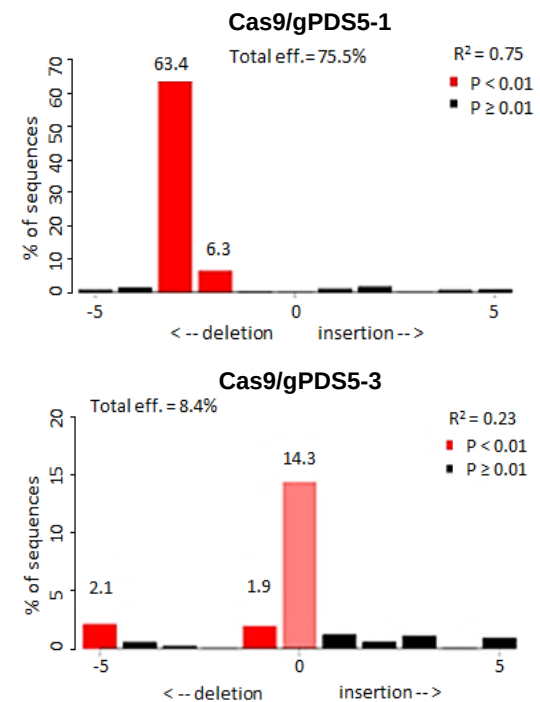
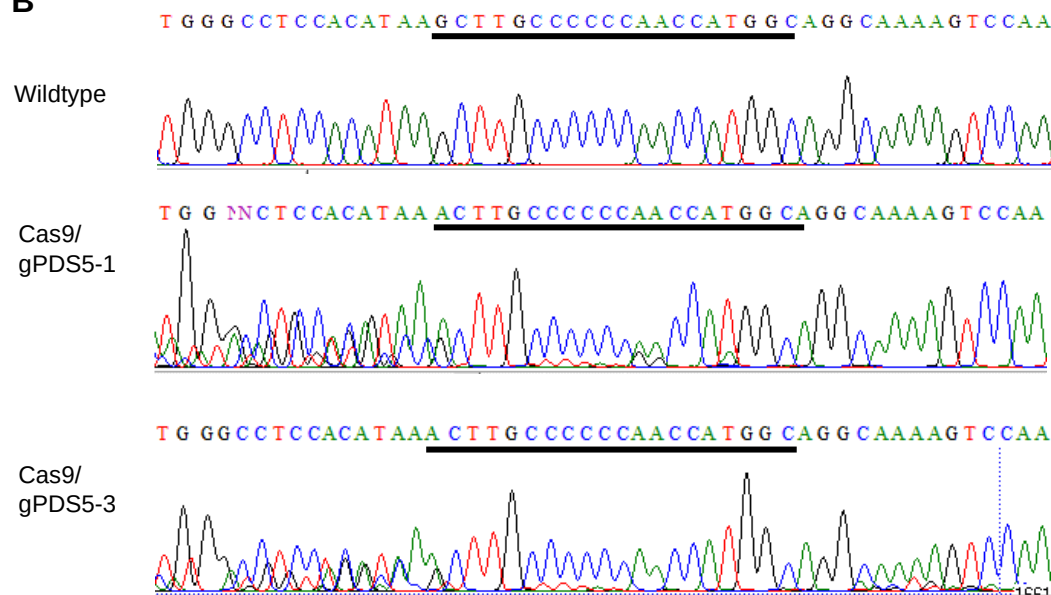
A**B**

Figure S2. *In silico* sequence analysis of CRISPR/Cas9-mediated mutagenesis on *EgPDS* gene. The mutation on *EgPDS* targeted sites were analyzed using Sanger sequencing and the occurrence of insertion and deletion events was qualitatively detected using TIDE algorithm using the electropherogram for **(A)** Cas9/gPDS4 and **(B)** Cas9/gPDS5 mutation regions.