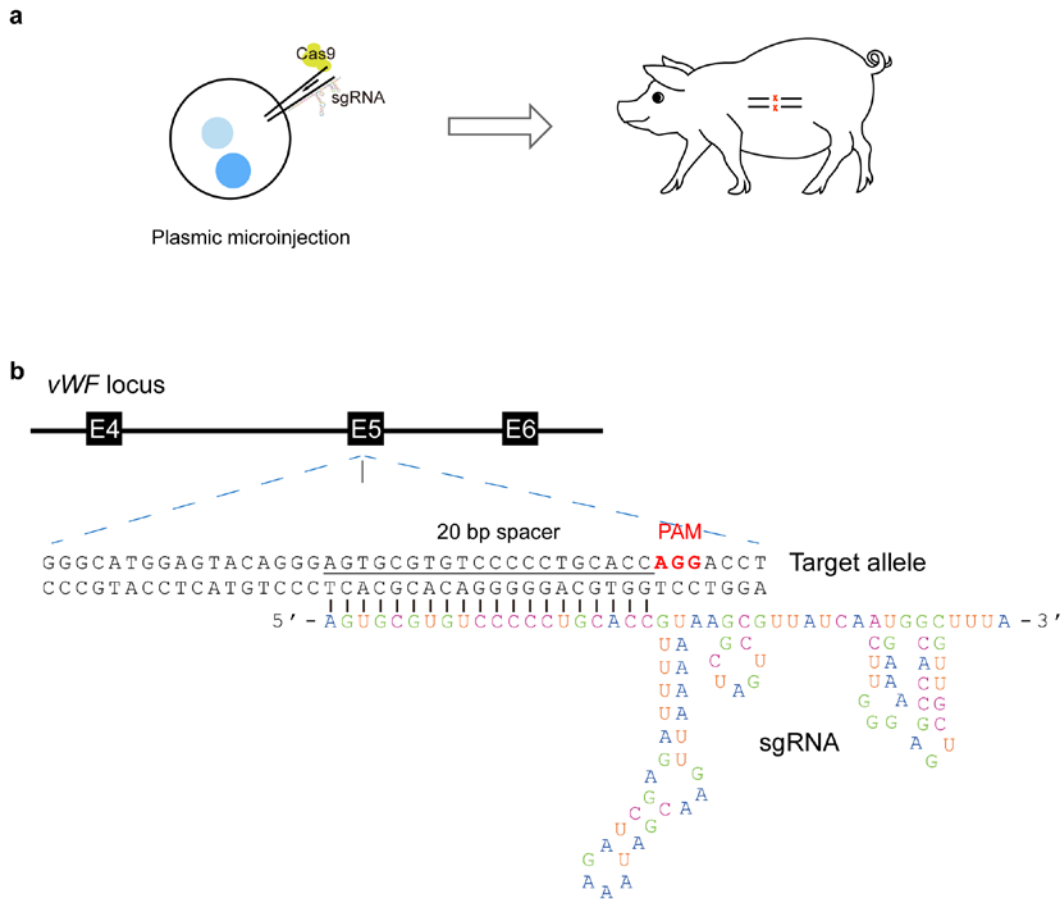


## Supplementary Figure 1



**Supplementary Figure S1 Schematic diagram of generation of *vWF* targeted pigs by zygote injection of Cas9 mRNA/sgRNA.** (a) *In vitro* transcribed Cas9 mRNA and sgRNA-*vWF* were co-injected into the cytoplasm of one-cell stage pig embryos. Then the injected embryos were transferred into recipient gilts to obtain gene disrupted piglets. (b) Strategy for sgRNA-mediated *vWF* targeting. The target site of *vWF* locus was at the fifth exon, and the sequences of target site and sgRNA-*vWF* were presented.