



Design of gRNAs for CRISPR/Cas9n directed deletion of IRF8. (A) Schematic representation of IRF8 locus with exons (boxes) and introns (lines). Filled boxes and open boxes represent protein coding and non-protein coding exons, respectively. Two pairs of CRISPR guided Cas9 nickases (Cas9n, arrow heads) generate two double strand breaks (DSB) in intron 2 and exon 3 (yellow). (B) DNA double strand at the intron 2 – exon 3 (yellow) boundary of IRF8. Guide RNA (gRNA) sequences are underlined in black, protospacer adjacent motif (PAM) in red. Red triangles mark the Cas9n cleavage site. Offset is the distance between two gRNAs. gRNA pairs generate 5' overhangs.