Activity of CRISPR/Cas9.

DNA: + indicates genomic DNA from JM8A3 ES cells transfected with 15 ug Pfkm pX330 plasmid and 5 ug PGKpuro plasmid placed under 2ug/ml puromycin selection for two days, and cultured another four days before DNA extraction. 5R1 and 5R2: pX330 plasmids targeted to 5’ side of exon. 3R1 and 3R2: pX330 plasmids targeted to 3’ side of exon. Cel I: + indicates addition of Cel I enzyme to PCR product. MT: empty lane. Arrowheads indicate DNA fragments produced by Cel I cleavage after mutant and wild type DNA strands present in PCR product were denatured and annealed.

University of Michigan Transgenic Core http://med.umich.edu/tamc/Cas9image
Activity of Endonucleases.
Fertilized mouse eggs were microinjected with endonucleases to cut genomic DNA. Eggs were cultured to the blastocyst stage. PCR was used to amplify a DNA surrounding the cut site. The PCR product was purified from an agarose gel and submitted for DNA sequencing. Blue shading indicates sgRNA sequence. Panel A: DNA sequencing chromatogram showing only wild type genomic DNA is present in the blastocyst. Panel B: DNA sequencing chromatogram showing multiple DNA sequences are present in the blastocyst. This indicates that nuclease cut the chromosome and the egg repaired the damage by non-homologous endjoining.