

ABSTRACT Gene knockout is a widely used method in biology for investigating gene function. Several technologies are available for gene knockout, including zinc–finger nucleasetechnology (ZFN), suicide plasmid vector systems, transcription activator–likeeffector protein nuclease technology (TALEN), Red homologous recombinationtechnology, CRISPR/Cas, and others. The study aims to serve as a reference for selecting appropriatetechniques.