

Customized Knockout Cell Line Engineering

High-efficiency CRISPR knockout cell line generation for functional genomics and drug discovery.

Powered by our proprietary FLASH delivery system, EDITGENE efficiently and safely delivers upgraded CRISPR/Cas9 into diverse cell types. This allows us to provide rapid and reliable custom knockout (KO) cell line services tailored to your needs for functional genomics research, disease mechanism studies, and drug target discovery. With experience from 4,500+ cell line projects, we deliver high-quality KO cell line in just 5 weeks.

Key Advantages

Optimized Editing Components

- Genome-wide validated gRNA
- High-activity Cas9 protein
- Scarless editing via RNP

Innovative FLASH Delivery

- High Efficiency
- Low Toxicity
- Broad cell type compatibility

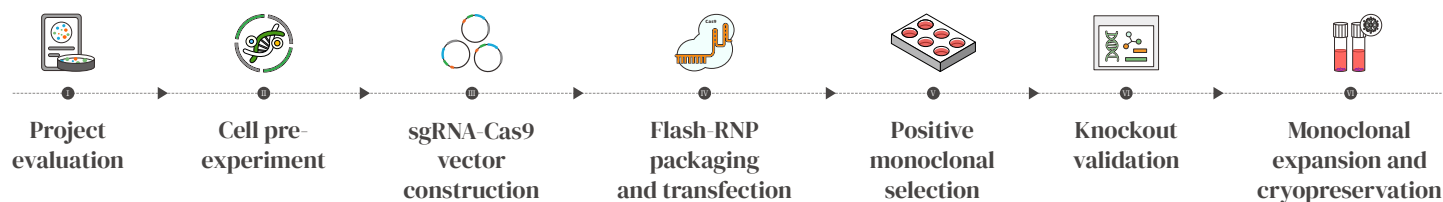
Automated Monoclonal Screening

- Minimizes cellular stress
- Increases cell survival rate
- Significantly shortens turnaround time

Rigorous Quality Control

- STR authentication and mycoplasma-free
- Sanger sequencing verification of complete allelic knockout

Technical Roadmap



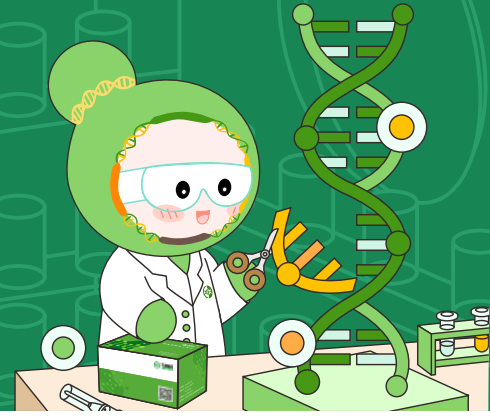
Applications

- Gene function studies
- Signaling pathway analysis
- Disease modeling
- Synthetic biology modification
- Drug target discovery



Ready-to-Ship Knockout Cell Line Collection

KO cell bank covering key research hotspot genes



KO Cell Line in Stock

Our KO Cell Line Bank covers the most popular drug targets (ADC, TME pathways, transmembrane proteins, TNF family, B7-CD28 family, Fc receptors, and more) plus 200 high-potential targets in immunology, neurology, and cancer. Whether you're developing drugs or seeking new breakthroughs, EDITGENE has the perfect knockout cell line for you.

Real Stock	Real Monoclonal	Real Homozygous
<ul style="list-style-type: none"> • 5000+ KO Cell Lines • Covering the most popular targets 	<ul style="list-style-type: none"> • 3D Single-Cell Printer • Visual confirmation of each cell 	<ul style="list-style-type: none"> • High-Depth Sequencing • All alleles coverage, all alleles edited

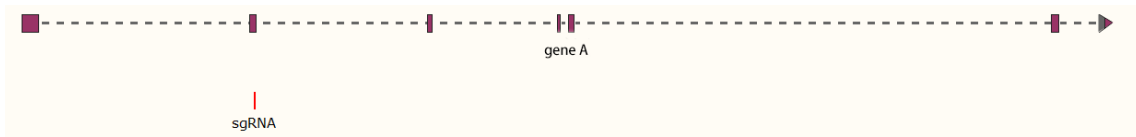
Case Study

Introduction of small insertions or deletions (indels) at the target site to disrupt the open reading frame, resulting in premature stop codons and loss of functional protein expression.

Ideal for creating complete loss-of-function models through single-site edits.

Objective: Single-Gene Knockout in HEK293 Cells

Project Design: sgRNA was designed in exon 2 of target gene.



Sequencing results: A 1-base deletion occurred at the sgRNA site of gene A with a knockout efficiency of 100%, resulting in a frameshift mutation that caused premature termination of expression, indicating that gene A was successfully knocked out.

