



Gibco Pluripotent Stem Cell (PSC) Gene Editing Demo Kit

Successfully generate and detect knockouts and point mutations in your cell line

The Gibco™ Pluripotent Stem Cell (PSC) Gene Editing Demo Kit offers the reagents for successfully generating and detecting knockouts and point mutations in your cell line of interest. We also offer a comprehensive portfolio of validated tools and services, designed to help researchers overcome the challenges of genome editing in stem cells and to build successful iPSC-derived disease models.

Key features of the kit:

- Designed to reduce effort and cycle times
- Generate pools with high editing efficiency—up to approximately 90% knockouts and 40% homology-driven repair (HDR)
- Successfully quantitate editing efficiency
- Isolate clonal lines easily

This kit includes Gibco™ StemFlex™ Medium (500 mL, Cat. No. A3349401); Gibco™ rhLaminin-521 (0.1 mg, Cat. No. A29248); Gibco™ RevitaCell™ Supplement (100X, 5 mL, Cat. No. A2644501); Invitrogen™ TrueCut™ Cas9 Protein v2 (10 µg, Cat. No. A36496); Invitrogen™ TrueGuide™ sgRNA Positive Control, HPRT1, human (3 nmol, Cat. No. A35524); Invitrogen™ GeneArt™ Genomic Cleavage Detection Kit (20 rxns, Cat. No. A24372); and a protocol (electronic).

Order your demo kit today at thermofisher.com/pscgenomeediting

Cell line	Genomic loci	% indel	% HDR
Gibco iPSC	<i>KCNH2</i> A422T	88.1	5
Gibco iPSC	<i>SCN5A</i> E1053K	44.5	38
Gibco iPSC	<i>TNNT2</i> R141W	88.5	5
BS3 iPSC	<i>LRRK2</i> G2019S	62.6	41
BS3 iPSC	<i>LRRK2</i> I2020T	91	5

Figure 1. Genome editing in human pluripotent stem cells. Gibco episomal and BS3 iPSC lines were edited at various genomic loci associated with different diseases. Guide RNAs with a single-stranded DNA oligo donor were delivered using the Invitrogen™ Neon™ Transfection System. Indel percentages up to ~90% and approximately 5–40% HDR were observed (target dependent). Request a demo for the Neon Transfection System at thermofisher.com/neon when you order the PSC Gene Editing Demo Kit.

Ordering information

Product	Size	Cat. No.
Gibco Pluripotent Stem Cell (PSC) Gene Editing Demo Kit	1 kit	A43203