Product Components List



Cellartis® iPSC rCas9 Electroporation and Single-Cell Cloning System

Catalog No. Amount 632643 1 system

Description

The Cellartis iPSC rCas9 Electroporation and Single-Cell Cloning System is a complete system that allows efficient, footprint-free gene editing of human induced pluripotent stem cells (iPSCs) via electroporation, followed by successful clonal expansion of single, edited human iPSCs. Importantly, this system maintains karyotype and pluripotency during the whole editing process.

The Cellartis iPSC rCas9 Electroporation and Single-Cell Cloning System contains Guide-it™ sgRNA In Vitro Transcription Components v2 (Cat. No. 632637) and the Guide-it IVT RNA Clean-Up Kit (Cat. No. 632638), which are both also included in the Guide-it sgRNA In Vitro Transcription Kit (Cat. No. 632635). These components are used to produce high yields of single guide RNAs (sgRNAs) that can be delivered into mammalian cells by electroporation along with our Guide-it Recombinant Cas9 (Electroporation-Ready) (Cat. No. 632641). This recombinant wild-type *Streptococcus pyogenes* Cas9 nuclease is expressed with a C-terminal nuclear localization signal (NLS). The Cas9 protein solution has been verified to be sterile and well-tolerated by mammalian cells when electroporated along with a sgRNA as a ribonucleoprotein complex (RNP) for knockout experiments, or as an RNP with a donor repair template for knockin experiments.

The Cellartis iPSC rCas9 Electroporation and Single-Cell Cloning System also contains Cellartis DEF-CS™ 500 Basal Medium (Cat. No. Y30011), Cellartis iPSC Single-Cell Cloning DEF-CS COAT-1 (Cat. No. Y30018), and Cellartis iPSC Single-Cell Cloning DEF-CS Additives (Cat. No. Y30019), which are all also included in the Cellartis iPSC Single-Cell Cloning DEF-CS Culture Media Kit (Cat. No. Y30021)—a defined culture system for efficient single-cell cloning and expansion of edited human pluripotent stem cell clones.

Package Contents

- Cellartis DEF-CS 500 Basal Medium (Cat. No. Y30011) (Not sold separately) >> View Components
- Cellartis iPSC Single-Cell Cloning DEF-CS Additives (Cat. No. Y30019) (Not sold separately)
 View Components
- Cellartis iPSC Single-Cell Cloning DEF-CS COAT-1 (Cat. No. Y30018) (Not sold separately)
 View Components
- Guide-it Recombinant Cas9 (Electroporation-Ready) (Cat. No. 632641) >> View Components
- Guide-it sgRNA In Vitro Transcription Components v2 (Cat. No. 632637) (Not sold separately)
 View Components
- Guide-it IVT RNA Clean-Up Kit (Cat. No. 632638) >> View Components

For storage conditions, please see the Certificate of Analysis supplied with each component.

Cellartis iPSC rCas9 Electroporation and Single-Cell Cloning System

Product Documents

Documents for our products are available for download at <u>takarabio.com/manuals</u> The following documents apply to this product:

- Cellartis iPSC rCas9 Electroporation and Single-Cell Cloning System User Manual
- Cellartis iPSC Single-Cell Cloning DEF-CS Culture Media Kit User Manual

Notice to Purchaser

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This document has been reviewed and approved by the Quality Department.

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