

Genome Editor Plus GEB+



Enables tetraploid embryos production and oocyte activation by adding AC voltage output function to Genome Editor

Covers all early all embryo experiments including oocytes and zygotes with one machine

Features

AC voltage output function

The Genome Editing by Electroporation of Cas9 Protein (GEEP) method published in 2016, in which CUY21EDITII was used, has enabled high-throughput zygote genome editing under uniform conditions using specialized electrodes (LF501 & GE series) compared with conventional microinjection method.

GEB15+ is equipped with alternating current (AC) voltage output function as well as the functions that are included in our Genome Editor, which specializes in fertilized egg genome editing. GEB+ can therefore cover all early embryo experiments.

Tetraploid Embryo Production, Oocyte Activation

In addition to Genome Edit mode, GEB+ is equipped with Fusion mode. Fusion mode enables tetraploid production and oocyte activation by inputting the optimum electrical conditions.

Saving protocols and history

GEB+ adopts a large-sized touch panel, and you can intuitively input electrical conditions into the machine by checking the waveform patterns visually. More than 20,000 protocols, which can be given any name, can be saved in GEB15. The output data can also be transferred to your PC via USB memory.

Specification

Genome Edit mode

Voltage range	1-200 V in increments of 1 V	Waveform	Square wave
Pulse width (Pon)	0.1 - 1000 ms	Number of pulses	1-1000 for (+); 1-500 for (+/-) or ALT
Pulse interval (Poff)	1.0 - 1000 ms		

Activation mode

AC

Waveform	Sinusoidal wave
Voltage (Effective voltage)	0-20.0 V in increments of 0.1 V
Frequency	1MHz
Duration time	0-99.9 sec in increments of 0.1 sec

DC pulses

Waveform	Square
Voltage	1-200 V in increments of 1 V
Pulse width	5 - 999 μ sec in increments of 1 μ sec
Pulse interval	0.01 - 9.99 sec in increments of 0.01 sec
Number of pulses	1-1000 for (+); 1-500 for (+/-) or ALT

Measurement range of resistance	up to 4 k Ω	Power unit	Single-phase 100V; 260VA; 50/60Hz
Dimensions/Weight	240 mm(W)-380 mm (D without projections) -190 mm (H without rubber foot), 5.5 kg		

* Product specifications are subject to change without notice