

## Product data sheet

REH/Luciferase stable cell line

Catalog Number: CL-1664

Storage: Liquid nitrogen

Components: 1 vial contains  $\sim 2 \times 10^6$  cells in Cell freezing medium

### Product description

REH/Luciferase cells are derived from the human B-cell acute lymphoblastic leukemia (ALL) cell line REH by stably integration of a constitutive Firefly luciferase stably expression construct. REH cells are used to study the biology of B-ALL, including signaling pathways, cell proliferation, and apoptosis, as well as test new therapeutic approaches. REH cells can be used to identify suitable antigen targets for CAR-T therapies. Common targets for B-cell malignancies include CD19 and CD22, both of which are expressed on REH cells. REH/Luciferase cells stably express Firefly luciferase, can be used for *in vitro* assays and *in vivo* imaging.

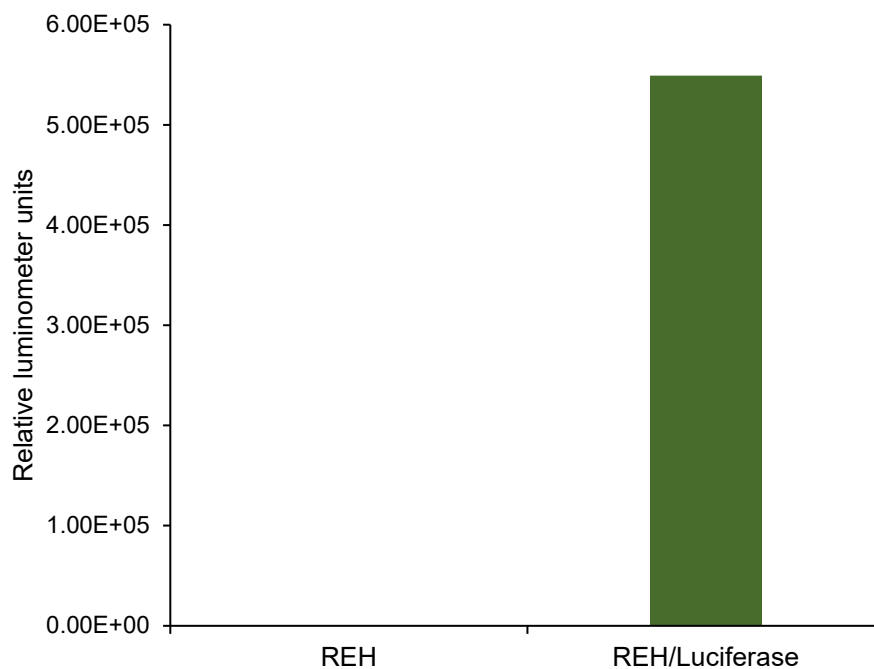


Figure 1. Firefly luciferase expression in REH/luciferase stable cell line.

The luminescence intensity of  $\sim 5000$  cells was detected by Bright-Glo™ luciferase Assay System (Promega, Cat E2610).

### Cell line description

Organism: *Homo sapiens* (human)

Tissue: Peripheral blood  
Cell Type: B lymphoblast  
Morphology: Lymphoblast  
Culture Properties: Suspension  
Disease: Acute lymphocytic leukemia  
Biosafety Level: 2

## Medium

1. Complete culture medium: RPMI-1640, 10% fetal bovine serum (FBS)  
1 µg/mL of puromycin may be added to the culture medium. **Puromycin should not be added until a culture has been well established from the thawed cells.**
2. Freeze medium: Fetal bovine serum (FBS), 6% DMSO

## Culture procedure

### Thawing of frozen cells

1. Add 2 ml of the complete culture medium into a T-25 suspension cell culture flask and place it into the cell culture incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).
2. Thaw the frozen cryovial by gentle agitation in a 37 °C water bath in 1-2 minutes.
3. Remove the cryovial from the water bath as soon as the contents are thawed, and decontaminate by wiping with 70% ethanol.
4. Transfer the thawed cell suspension to a centrifuge tube containing 10 ml of Complete culture medium, centrifuge at 300 g for 5 minutes.
5. Remove the medium by aspiration, resuspend the cells with the pre-incubated 2 ml of the complete culture medium from step 1 by gently pipetting up and down.
6. Transfer the cells back to the T-25 suspension cell culture flask.
7. Place the cells in a 37°C incubator with 5% CO<sub>2</sub>.

### Sub-culturing

Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at  $2 \times 10^5$  viable cells/ml. Maintain cell density between  $1 \times 10^5$  and  $1 \times 10^6$  viable cells/ml.

Renew or add fresh medium every 2-3 days.