

Product data sheet

CCRF-CEM/GFP-luciferase stable cell line

Catalog Number: CL-1493

Storage: Liquid nitrogen

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

Product description

CCRF-CEM/GFP-luciferase cells are derived from the human CCRF-CEM T lymphoblast cell line by stably integration of a constitutive GFP and Firefly luciferase expression construct. CCRF-CEM cell line was generated from acute lymphoblastic leukemia, has been widely used in cancer research and drug development. CCRF-CEM/GFP-luciferase cells stably express GFP and Firefly luciferase, can be used for *in vitro* assays and *in vivo* imaging.

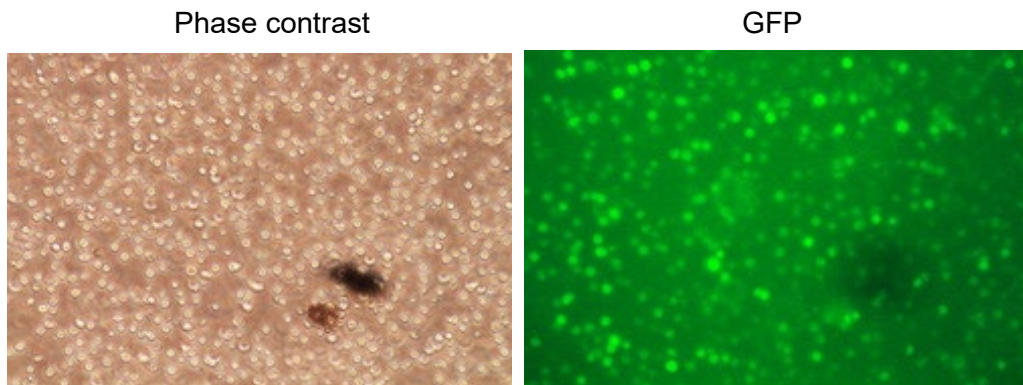


Figure 1. GFP expression in CCRF-CEM/GFP-luciferase stable cell line

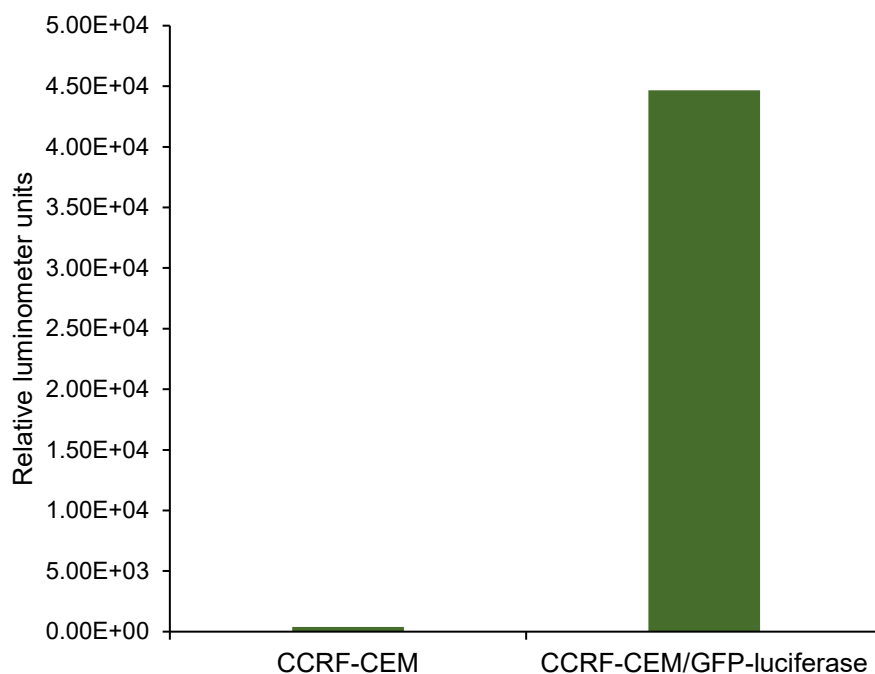


Figure 2. Firefly luciferase expression in CCRF-CEM /GFP-Luciferase stable cell line. The luminescence intensity of ~5000 cells was detected by Bright-Glo™ luciferase Assay System (Promega, Cat E2610).

Cell line description

Organism: Homo sapiens (human)
Tissue: Peripheral blood
Cell Type: T lymphoblast
Morphology: Lymphoblast
Culture Properties: Suspension
Disease: Acute lymphoblastic leukemia ALL
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. Thaw the frozen cryovial by gentle agitation in a 37 °C water bath in 1-2 minutes.
2. Remove the cryovial from the water bath as soon as the contents are thawed, and decontaminate by wiping with 70% ethanol.
3. Transfer the thawed cell suspension to a centrifuge tube containing 10 ml of Complete culture medium, centrifuge at 500 g for 5 minutes.
4. Remove the medium by aspiration, resuspend the cells with 2 ml of the Complete culture medium by gently pipetting up and down.
5. Transfer the cells to a T-25 suspension cell culture flask.
6. Place the cells in a 37°C incubator with 5% CO₂.

Sub-culturing

Cultures can be maintained by the addition of fresh medium or replacement of medium. Maintain cell density between 1×10^5 and 2×10^6 viable cells/ml.

Renew or add fresh medium every 2-3 days.