

Product data sheet

MV4-11/Luciferase stable cell line

Catalog Number CL-1222

Storage: Liquid nitrogen

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

Product description

MV4-11/Luciferase cells are derived from the human MV4-11 macrophage cell line by stably integration of a constitutive Firefly luciferase expression construct. MV4-11 cell line was generated from biphenotypic B myelomonocytic leukemia, has been widely used in cancer research and drug development. MV4-11/Luciferase cells express Firefly luciferase under the control of the CMV promoter, can be used for *in vitro* assays and *in vivo* imaging.

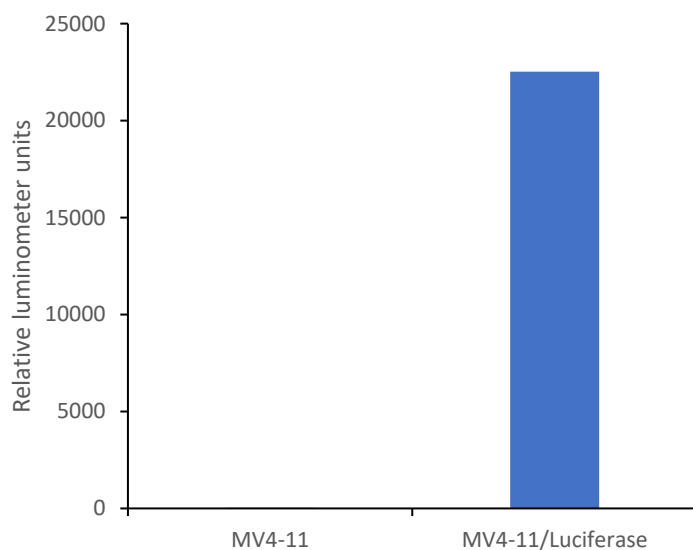


Figure 1. Firefly luciferase expression in MV4-11/Luciferase stable cell line.

The luminescence intensity of ~ 3000 cells was detected by Bright-Glo™ Luciferase Assay System (Promega, Cat E2610).

Cell line description

Organism: Homo sapiens (human)

Tissue: Peripheral blood

Cell Type: macrophage

Morphology: Lymphoblast

Culture Properties: Suspension

Disease: biphenotypic B myelomonocytic 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: RPMI-1640, 10% 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 4 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 addition or replacement of fresh medium. Start cultures at 2×10^5 cells/mL and maintain between 1×10^5 and 1×10^6 cells/mL.