

Product data sheet

MM.1R/GFP-luciferase stable cell line

Catalog Number CL-1620

Storage: Liquid nitrogen

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

Product description

MM.1R/GFP-luciferase cells are derived from the human B lymphoblast MM.1R cell line by stably integration of a constitutive GFP-firefly luciferase expression construct. MM.1R cells have been used in cancer research and drug development. MM.1R/GFP-luciferase cells stably express turboGFP and firefly luciferase, can be used for in vitro assays and in vivo imaging.

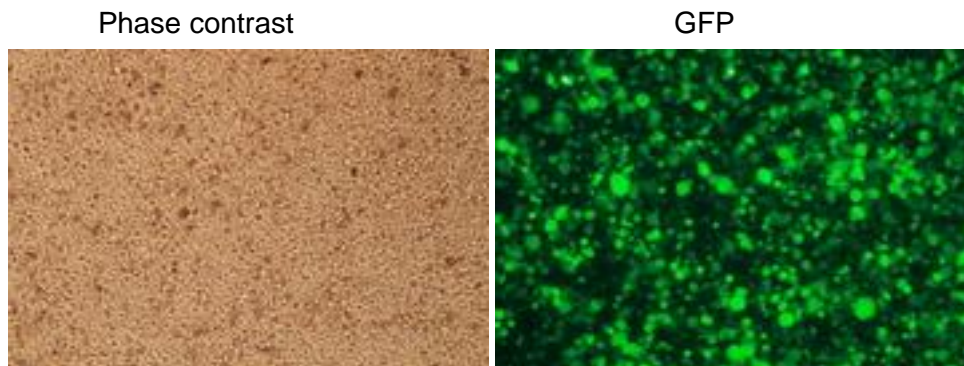


Figure 1. GFP expression in MM.1R/GFP-luciferase stable cell line

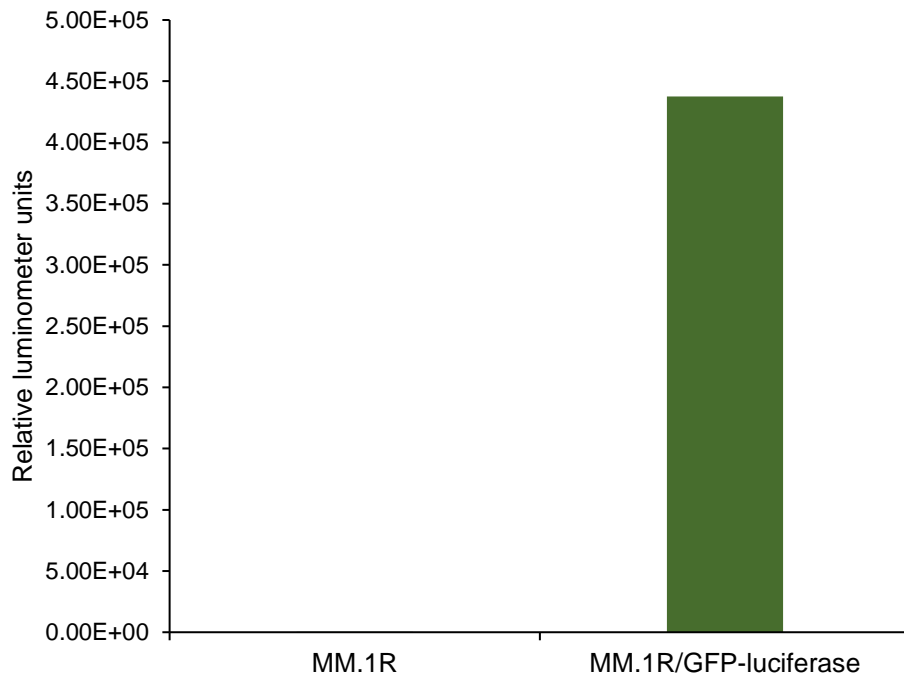


Figure 2. Firefly luciferase expression in MM.1R/GFP-luciferase stable cell line.
The luminescence intensity of ~5000 cells was detected by Bright-Glo™ luciferase Assay System (Promega, Cat E2610).

Cell line description

Organism: Homo sapiens (human)
Tissue: Peripheral blood
Cell Type: B lymphoblast
Morphology: Lymphoblast
Culture Properties: Mixed, suspension and attached cells
Disease: Multiple myeloma
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: FBS with 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 8 ml of the Complete culture medium by gently pipetting up and down.
5. Transfer the cells to a T-25 cell culture flask.
6. Place the cells in a 37°C incubator with 5% CO₂.

Sub-culturing

1. Transfer the suspension cells into a 15 ml or 50 ml centrifuge tube.
2. Briefly rinse the adherent cells with PBS, add it to the centrifuge tube in step 1.
3. Add 0.25% (w/v) Trypsin-EDTA to cover the adherent cells, observe cells under an inverted microscope until cell layer is dispersed. Add appropriate volume of complete growth medium and aspirate cells by gently pipetting, add it to the centrifuge tube in step 1.
4. Centrifuge at 500 g for 5 minutes. Remove the medium by aspiration, resuspend the cells with complete culture medium by gently pipetting up and down. Add appropriate aliquots of the cell suspension to new cell culture flask with the subcultivation ratio of 1:2 to 1:4.

Renew or add fresh medium every 2-3 days.