FenicsBIO

Product data sheet

MOLM-13/GFP-Luciferase stable cell line

Catalog Number: CL-2792

Storage: Liquid nitrogen

Components: 1 vial contains ~2 x10^6 cells in Cell freezing medium

Product description

MOLM-13/GFP-Luciferase cells are derived from the human leukemia cell line MOLM-13 by stably integration of a constitutive GFP-Firefly luciferase stably expression construct. The MOLM-13 cell line is a widely used human acute myeloid leukemia (AML) model, particularly classified as FAB M5a (acute monocytic leukemia), has been widely used in AML research, especially when investigating mechanisms related to MLL gene rearrangements and FLT3-ITD mutations. MOLM-13/GFP-Luciferase cells stably express GFP and firefly luciferase, can be used for in vitro assays and in vivo imaging.

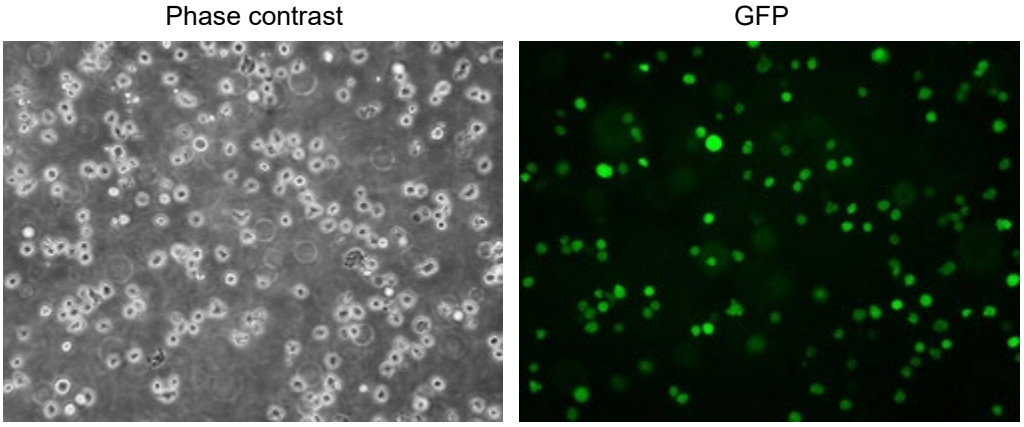

Figure 1. GFP expression in MOLM-13/GFP-Luciferase stable cell line.

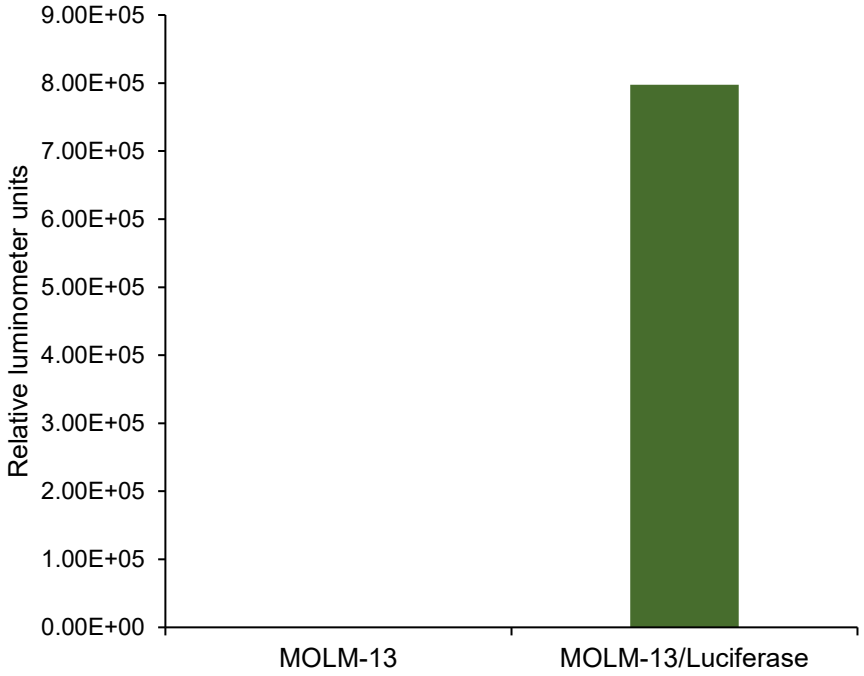

Figure 2. Firefly luciferase expression in MOLM-13/luciferase stable cell line.

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

Morphology: monoblast-like

Culture Properties: Suspension

Disease: Acute myeloid leukemia

Biosafety Level: 2

Medium

1. Complete culture medium: RPMI-1640, 20% 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. Freezing 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% CO2.

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 x 10^5 viable cells/ml. Maintain cell density between 2 x 10^5 and 2 x 10^6 viable cells/ml.

Renew or add fresh medium every 2-3 days.