

## Product data sheet

MOLT-4/Luciferase stable cell line

Catalog Number: CL-1218

Storage: Liquid nitrogen

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

### Product description

MOLT-4/Luciferase cells are derived from the human MOLT-4 T lymphoblast cell line by stably integration of a constitutive Firefly luciferase expression construct. MOLT-4 cell line was generated from acute lymphoblastic leukemia, has been widely used in cancer research and drug development. MOLT-4/Luciferase cells stably express Firefly luciferase, can be used for *in vitro* assays and *in vivo* imaging.

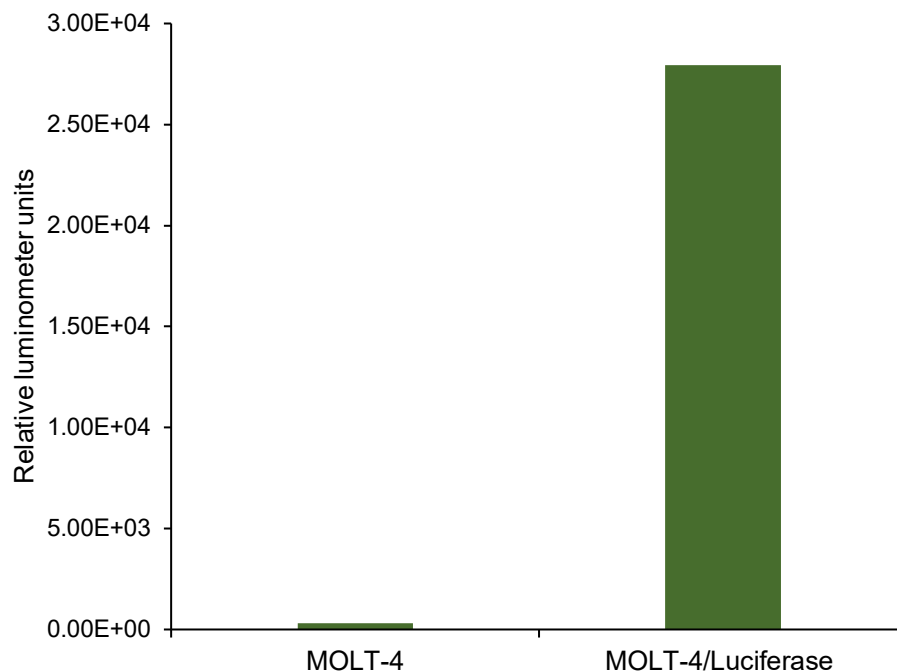


Figure 1. Firefly luciferase expression in MOLT-4/Luciferase stable cell line.

The luminescence intensity 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% CO<sub>2</sub>.

### Sub-culturing

Cultures can be maintained by the addition of fresh medium or replacement of medium.

Maintain cell density between  $4 \times 10^5$  and  $2 \times 10^6$  viable cells/ml.

Renew or add fresh medium every 2-3 days.