

Product data sheet

Ramos/GFP-Luciferase stable cell line

Catalog Number: CL-1653

Storage: Liquid nitrogen

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

Product description

Ramos/GFP-Luciferase cells are derived from the human B lymphocyte cell line Ramos by stably integration of a constitutive GFP-Firefly luciferase stably expression construct. Ramos cell line was generated from a human Burkitt's lymphoma which does not possess the EBV genome, has been widely used in cancer research, virus study and drug development. Ramos cells express CD19, CD20, and other B-cell markers, making them a useful model for B-cell studies and testing the efficacy of monoclonal antibodies and CAR T-cell therapies targeting B-cell malignancies. Ramos/GFP-Luciferase cells offer stable expression of both GFP and firefly luciferase, making them suitable for *in vitro* assays and *in vivo* imaging applications.

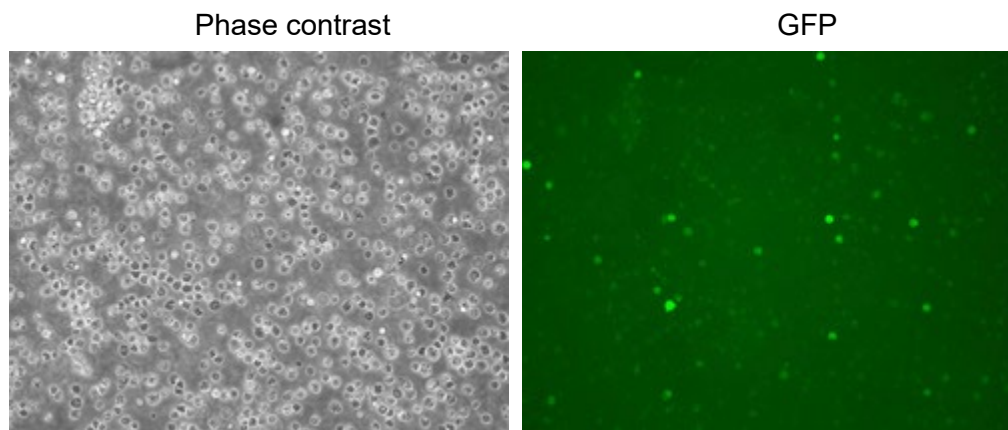


Figure 1. GFP expression in Ramos/GFP-luciferase stable cell line.

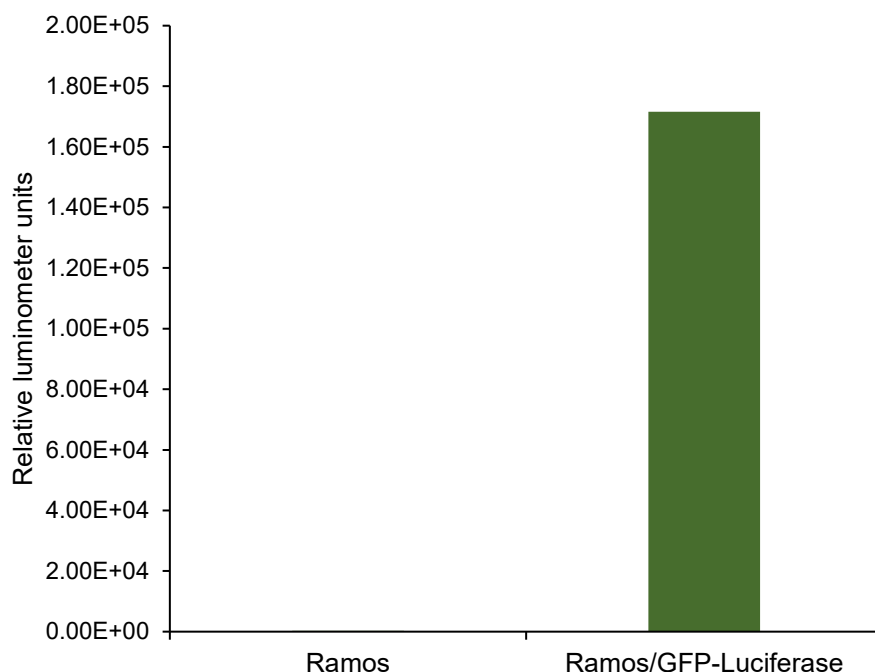


Figure 2. Firefly luciferase expression in Ramos/GFP-Luciferase stable cell line.

The luminescence intensity of ~5000 cells was detected by Bright-Glo™ luciferase Assay System (Promega, Cat E2610).

Cell line description

Organism: *Homo sapiens*, human

Cell Type: B lymphocyte

Morphology: Lymphoblast

Culture Properties: Suspension

Disease: Burkitt's Lymphoma

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. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 2×10^5 viable cells/ml. Maintain cell density between 2×10^5 and 1×10^6 viable cells/ml.

Renew or add fresh medium every 2-3 days.