FenicsBIO

Product data sheet

HepG2/GFP-luciferase stable cell line

Catalog Number: CL-1514

Storage: Liquid nitrogen

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

Product description

HepG2/GFP-luciferase cells are derived from the human hepatocarcinoma HepG2 cell line by stably integration of a constitutive turboGFP and Firefly luciferase expression construct. The HepG2 cell line has been widely used in cancer research and drug development. HepG2/GFP-luciferase cells stably express turboGFP and Firefly luciferase, can be used for *in vitro* assays and *in vivo* imaging.

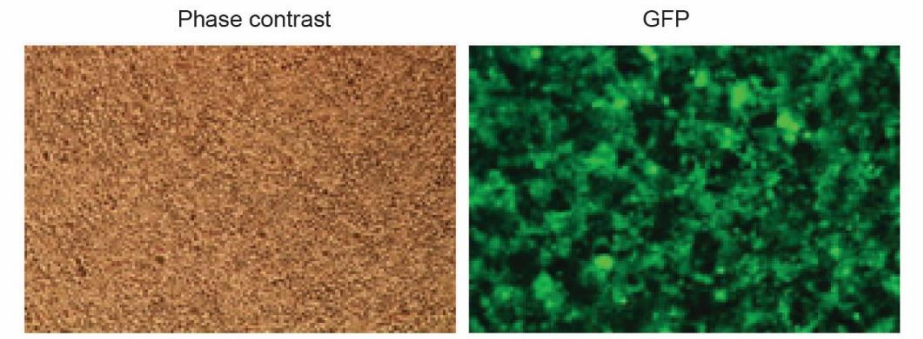

Figure 1. GFP expression in HepG2/GFP-luciferase stable cell line.

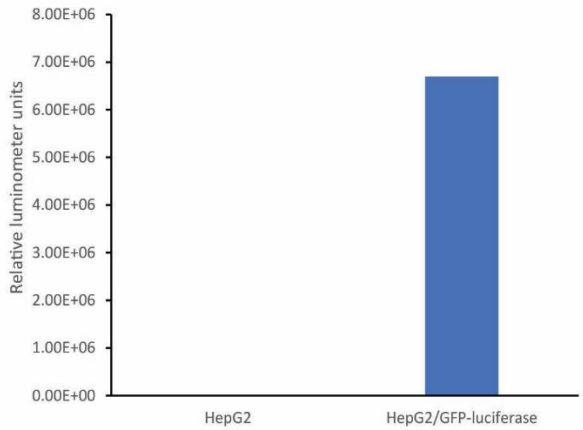

Figure 2. Firefly luciferase expression in HepG2/GFP-luciferase stable cell line.
The luminescence intensity was detected by Bright-Glo™ luciferase Assay System.

Cell line description

Organism: Homo sapiens (human)

Tissue: Liver

Morphology: epithelial-like

Culture Properties: adherent

Disease: Carcinoma; Hepatocellular

Biosafety Level: 2

Medium

1. Complete culture medium: EMEM with 10% fetal bovine serum (FBS)
   2 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 10 ml of the Complete culture medium by gently pipetting up and down.
5. Transfer the cells to a 10 cm cell culture dish.
6. Place the cells in a 37°C incubator with 5% CO2.

Sub-culturing

Volumes are given for a 10 cm cell culture dish. Increase or decrease the amount of dissociation medium needed proportionally.

1. Remove the medium by aspiration.
2. Briefly rinse the cell layer with 1xDPBS to remove all traces of serum that contains trypsin inhibitor.
3. Add 1 ml of Trypsin-EDTA (0.25%) solution to the dish and observe cells under an inverted microscope until cell layer is dispersed.
4. Add 4 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C with 5% CO2.