

Product data sheet

K-562/Luciferase stable cell line

Catalog Number: CL-1219

Storage: Liquid nitrogen

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

Product description

K-562/Luciferase cells are derived from the human K-562 lymphoblast cell line by stably integration of a constitutive Firefly luciferase expression construct. K-562 cell line was generated from chronic myelogenous leukemia, has been widely used in cancer research and drug development. K-562/Luciferase cells stably express Firefly luciferase, can be used for *in vitro* assays and *in vivo* imaging.

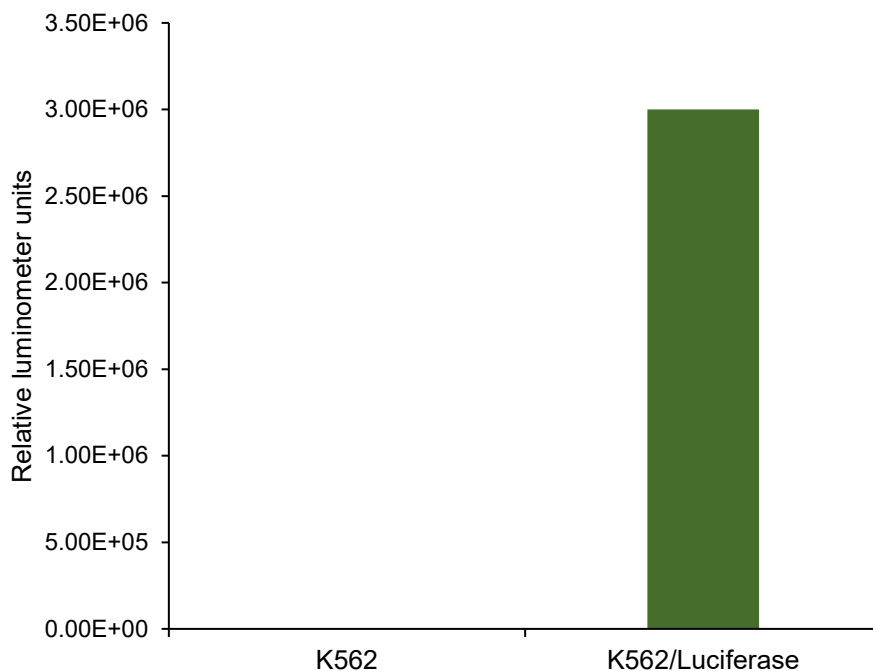


Figure 2. Firefly luciferase expression in K-562/Luciferase stable cell line.

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: Bone; Marrow

Morphology: Lymphoblast

Culture Properties: suspension

Disease: Chronic Myelogenous Leukemia Cml

Biosafety Level: 2

Medium

1. Complete culture medium: RPMI-1640, 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 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. Alternatively, cultures can be established by centrifugation with subsequent resuspension 1×10^5 viable cells/ml. Do not allow the cell density to exceed 1×10^6 cells/ml.

Renew or add fresh medium every 2-3 days.