FenicsBIO

Product data sheet

NIH3T3 SMAD/TGFbeta Reporter (Luc) stable cell line

Catalog Number CL-1454

Storage: Liquid nitrogen

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

Product description

NIH3T3 SMAD/TGFbeta Reporter (Luc) cells are derived from the mouse embryonic fibroblast cell line NIH3T3 by stably integration of a SMAD/TGFbeta firefly luciferase reporter construct. NIH3T3 cells have been widely used in biomedical research. NIH3T3 SMAD/TGFbeta Reporter (Luc) cells express firefly luciferase under the control of the SMAD/TGFbeta response elements, can be used for *in vitro* assays and *in vivo* imaging.

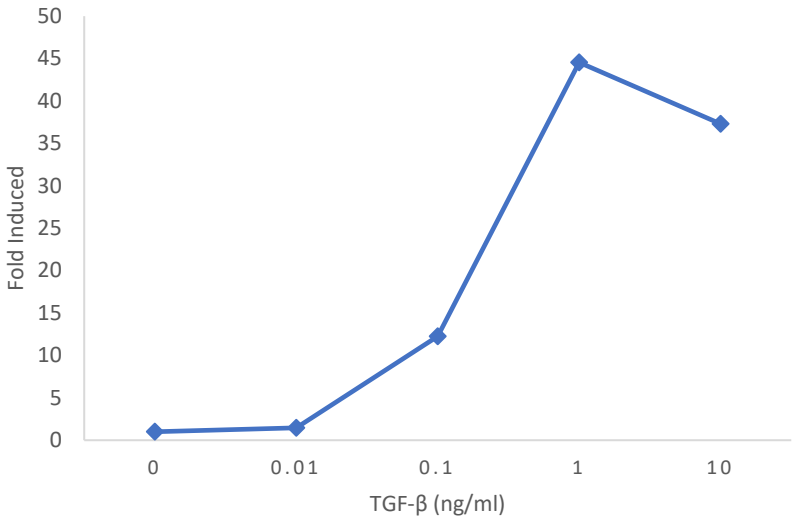

Figure 1. Dose-response of NIH3T3 SMAD/TGFbeta Reporter (Luc) cells to recombinant human TGF-β. Cells were stimulated with increasing concentrations of recombinant human TGF-β1 (hTGF-β1). After incubation for 24 hours, the TGF-β/Smad response was determined using Bright-Glo™ luciferase Assay System (Promega, Cat E2610).

Cell line description

Organism: Mus musculus, mouse

Tissue: embryo

Cell Type: fibroblast

Morphology: fibroblast

Culture Properties: adherent

Biosafety Level: 2

Medium

1. Complete culture medium: DMEM, 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: DMEM, 10% 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 10 ml of the Complete culture medium by gently pipetting up and down.
5. Transfer the cells to a 10cm cell culture dish.
6. Place the cells in a 37°C incubator with 5% CO2.

Sub-culturing

Subculture at least twice per week at 80% confluence or less.

Subcultivation Ratio: Inoculate 3 to 5 X 10^3 cells/cm^2

Medium Renewal: Twice per week.