

Product data sheet

MM.1S/NF-kB Reporter (Luc) stable cell line

Catalog Number: CL-2205

Storage: Liquid nitrogen

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

Product description

MM.1S/NF-kB Reporter (Luc) cells are derived from the human B lymphoblast MM.1S cell line by stably integration of a NF-kB firefly luciferase reporter construct. MM.1S cells have been used in to study multiple myeloma progression and test the new drugs or treatment strategies for multiple myeloma. MM.1R and MM.1S, were independently created from the parental cell line MM.1 to represent models of resistance and sensitivity, respectively, to dexamethasone. MM.1S/NF-kB Reporter (Luc) cells stably express firefly luciferase under the control of the NF-kB response elements, can be used for monitoring the activity of NF-kB signaling pathway.

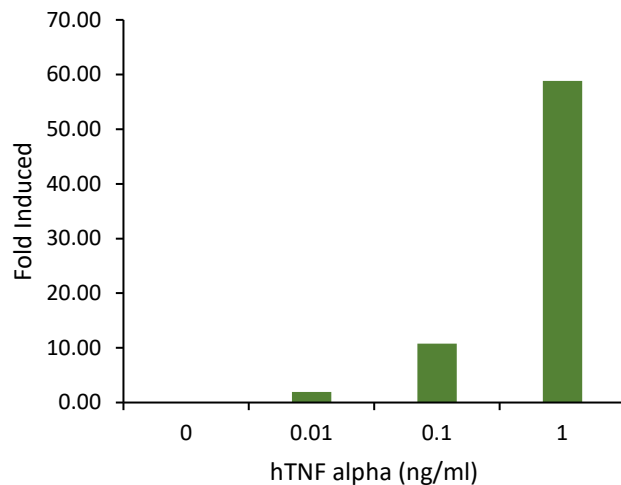


Figure 1. Dose-response of MM.1S/NF-kB Reporter (Luc) cells to recombinant human TNF alpha. Cells were stimulated with increasing concentrations of recombinant human TNF alpha (hTNF alpha). After incubation for 24 hours, the NF-kB response was determined using luciferase Assay.

Cell line description

Organism: Homo sapiens (human)

Tissue: Peripheral blood

Cell Type: B lymphoblast

Morphology: Lymphoblast

Culture Properties: Mixed, suspension and attached cells

Disease: Immunoglobulin A Lambda Myeloma

Biosafety Level: 2

Medium

1. Complete culture medium: RPMI-1640, 10% fetal bovine serum (FBS)
0.5 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 cell culture flask.
6. Place the cells in a 37°C incubator with 5% CO₂. Add fresh medium every 2-3 days.

Sub-culturing

1. Transfer the suspension cells into a 15 ml or 50 ml centrifuge tube.
2. Briefly rinse the adherent cells with PBS, add it to the centrifuge tube in step 1.
3. Add 0.25% (w/v) Trypsin-EDTA to cover the adherent cells, observe cells under an inverted microscope until cell layer is dispersed. Add appropriate volume of complete growth medium and aspirate cells by gently pipetting, add it to the centrifuge tube in step 1.
4. Centrifuge at 500 g for 5 minutes. Remove the medium by aspiration, resuspend the cells with complete culture medium by gently pipetting up and down. Add appropriate aliquots of the cell suspension to new cell culture flask with the subcultivation ratio of 1:2 to 1:4.