TetR stable cell line manual

Catalog Number	Product Name	Amount
SC005-Bsd	HEK293-TetR (**Bsd**)	1 vial of cells (>2 x 10^6 cells) in 80% DMEM, 10% FBS, 10% DMSO
SC005-Hygro	HEK293-TetR (**Hygro**)	1 vial of cells (>2 x 10^6 cells) in 80% DMEM, 10% FBS, 10% DMSO
SC005-Neo	HEK293-TetR (**Neo**)	1 vial of cells (>2 x 10^6 cells) in 80% DMEM, 10% FBS, 10% DMSO
SC005-Puro	HEK293-TetR (**Puro**)	1 vial of cells (>2 x 10^6 cells) in 80% DMEM, 10% FBS, 10% DMSO
SC005-RB	HEK293-TetR (**RFP-Bsd**)	1 vial of cells (>2 x 10^6 cells) in 80% DMEM, 10% FBS, 10% DMSO

Product Description

The HEK293 Cell Line is a permanent line established from primary embryonic human kidney transformed with sheared human adenovirus type 5 DNA. The expressed E1A adenovirus gene allows these cells to produce very high levels of protein.

Tetracycline repressor (TetR) stable cell is transformed from the HEK293 cell line and stably expresses tetracycline repressor (TetR) gene. It is established by transduction of TetR expression lentivirus. TetR is constitutively expressed in high-level under suCMV promoter. A selection marker was constitutively expressed under RSV promoter for selecting the stable cells.

AMSBIO provides premade stable TetR cell lines with different antibiotic marker, which can be paired with inducible expression particles for generation of the inducible expression cell lines of any given ORF.

Culture procedures

1. Thaw the frozen vial of cells quickly in a 37℃ water bath (1~3min), decontaminate the outside of the vial with 70% ethanol.
2. Transfer the entire contents of the cryovial into a T-75 cm^2 flask containing 15ml of pre-warmed complete medium. Incubate the cells overnight in a 37℃ incubator, 5% CO_2.
3. The following day, replace the medium with 15 ml of pre-warmed, complete medium (**Optional**: add antibiotic* in medium).

   *The final amount of antibiotic in the medium:
   Bsd (Blasticidin): 10 ug/ml
   Hygro (Hygromycin): 100 ug/ml
   Neo (Neomycin): 500 ug/ml
   Puro (Puromycin): 1 ug/ml
   RFP-Bsd (RFP-Blasticidin fusion): 10 ug/ml of blasticidin

4. Incubate the cells and monitor cell density.
5. Pass cells (1:10 dilution) when the culture reaches 80-90% confluent.
6. Freeze cells at a density of 3 x 10^6 cells/ml using 90% complete medium with 10% DMSO.

Complete medium

D-MEM (high glucose)
2mM L-glutamine
10% Fetal Bovine Serum (FBS)
0.1 mM MEM Non-Essential Amino Acids (NEAA)
1% Pen-strep (optinal)

Quality Control

Each vial contains greater than 2 x 10^6 cells with >95% viability before freeze. Cells are tested free of bacteria, viruses, mycoplasma.

Warranty

This product is warranted to perform as described when used in accordance with this manual. AMSBIO sole remedy for breach of warranty should be, at the option of AMSBIO, to repair or replace the product. **This product is for research use only**.