

## TetR stable cell line manual

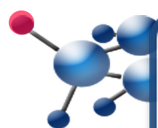
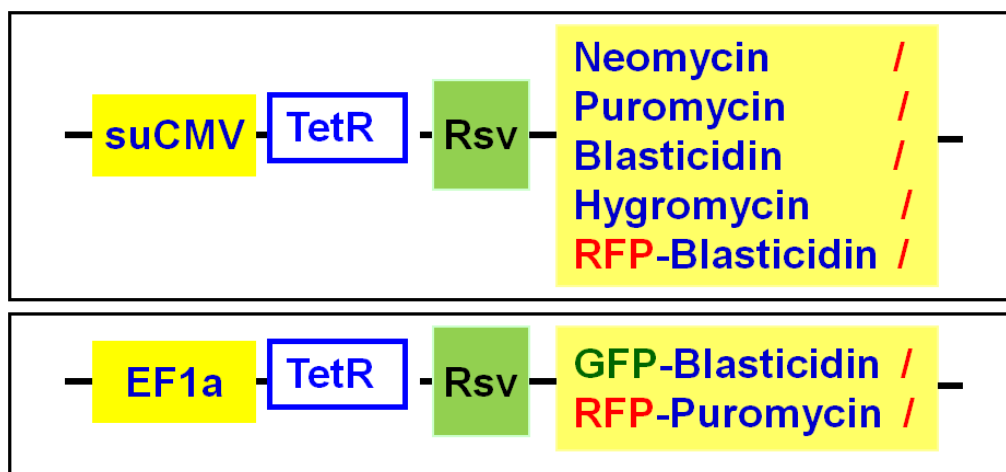
Catalog Number	Product Name	Amount
<b>SC005-Bsd</b>	HEK293-TetR ( <b>Bsd</b> )	1 vial of cells (>2 x 10 <sup>6</sup> cells) in 80% DMEM, 10% FBS, 10% DMSO
<b>SC005-Hygro</b>	HEK293-TetR ( <b>Hygro</b> )	
<b>SC005-Neo</b>	HEK293-TetR ( <b>Neo</b> )	
<b>SC005-Puro</b>	HEK293-TetR ( <b>Puro</b> )	
<b>SC005-RB</b>	HEK293-TetR ( <b>RFP-Bsd</b> )	
<b>SC005-RP</b>	HEK293-TetR ( <b>RFP-Puro</b> )	
<b>SC005-GB</b>	HEK293-TetR ( <b>GFP-Bsd</b> )	

**Storage:** Liquid Nitrogen.

### Product Description

The HEK293 Cell Line is a permanent cell 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 at high-levels under suCMV promoter or an **enhanced EF1a** promoter. A selection marker (an antibiotic marker or a fluorescent-antibiotic fusion dual marker) is constitutively expressed under RSV promoter. Please see the structure of the **expression cassette** (below) that integrated in the cell genome.



Amsbio provides premade stable TetR cell lines with different antibiotic marker, which can be used together with **inducible expression lentivirus** for the inducible target expression or generation of the target specific inducible expression cell lines.

### **Culture procedures**

1. Thaw the frozen vial of cells quickly in a 37°C water bath (1-3min), decontaminate the outside of the vial with 70% ethanol.
2. Transfer the entire contents of the cryovial into a T75 cm<sup>2</sup> flask containing 15 ml of pre-warmed complete medium. Incubate the cells overnight in a 37°C incubator, 5% CO<sub>2</sub>.
3. The following day, replace the medium with 15 ml of pre-warmed, complete medium.

**Note:** To maintain the cell line genetic stability for long-term culture, you can add the antibiotic into the culture medium. So optionally, add the specific antibiotic (dependent upon cell line) in the medium at the final concentration as follows:

Bsd (Blasticidin): 10 µg/ml  
Hygro (Hygromycin): 100 µg/ml  
Neo (Neomycin): 500 µg/ml  
Puro (Puromycin): 1 µg/ml

4. Incubate the cells and monitor cell density.
5. Passage cells (1:10 dilution) when the culture reaches 80-90% confluency.
6. Freeze cells at a density of 3 x 10<sup>6</sup> 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

### **Quality Control**

Each vial contains greater than 2 x 10<sup>6</sup> cells with >95% viability before freeze. Cells are tested to be free from bacteria, viruses and mycoplasma.

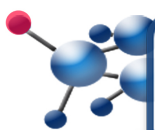
### **Warranty**

1. This product is warranted to perform as described when used in accordance with this manual. Amsbio's sole remedy for breach of warranty should be, at the option of Amsbio, to repair or replace the product if this product does not meet the stated quality standard.
2. By paying the purchase price, buyer is granted a non-transferable, non-exclusive license to use the product. This product is sold **for research and development purposes only**. This product is limited to the laboratory that the product is delivered to. Furthermore, **research use only** means

that this product is excluded, without limitation, from re-sale, repackaging, or modification to be used for the making or selling of any commercial products or services.

### Related Products:

<b>Product Category</b>	<b>Product Description:</b> <b>Pre-made expression lentiviruses with different selection markers.</b>
<b>Pre-made stable cell lines</b>	Mammalian cell lines with different selection markers, expressing CRE recombinase, or a fluorescent protein (GFP/RFP/CFP/YFP), or CRE recombinase, or a human ion channel target, or loxP response element (CRE reporting, ColorSwitch), or lacZ target, or a human ORF.
<b>GFP / RFP/ YFP/ CFP</b>	Premade lentivirus expressing a <b>fluorescent protein</b> with different antibiotic marker.
<b>Luciferase expression</b>	Premade lentivirus for all kinds of luciferase protein expression: <b>firefly, Gaussia, Renilla and Cypridina</b> with different antibiotic selection markers.
<b>CRE recombinase</b>	Premade lentivirus for expressing <b>nuclear permeant CRE</b> recombinase with different fluorescent and antibiotic markers.
<b>LoxP ColorSwitch</b>	Premade lentivirus expressing "LoxP-GFP-Stop-LoxP-RFP" cassette, used to monitor the CRE recombination event in vivo.
<b>TetR inducible repressor</b>	Premade lentivirus expressing TetR (tetracycline regulator) protein, the repressor protein for the inducible expression system.
<b>iPS factors</b>	Premade lentivirus for human and mouse iPS ( <b>Myc, NANOG, OCT4, SOX2, FGF4</b> ) factors with different fluorescent and antibiotic markers
<b>Human and mouse ORFs</b>	Premade lentivirus expressing <b>hundreds of human and mouse ORFs</b> with RFP-Blasticidin fusion dual markers.
<b>Living cell imaging</b>	Pre-made lentivirus particles for Cell Organelle imaging for <b>Nucleus, Cytoplasm, Endoplasmic Reticulum, Golgi, Mitochondria, Nuclear membrane, Peroxisome, Plasma membrane, Microtubule, Chromatin, Annexin, Actin, Connexin</b> , and more.
<b>Fluorescent-ORF fusion</b>	Pre-made lentivirus expression a " <b>GFP/RFP/CFP-ORF</b> " fusion target.
<b>shRNA lentivirus</b>	Premade shRNA lentivirus for knockdown a specific genes ( <b>P53, LacZ, Luciferase</b> and more).
<b>Negative controls</b>	Premade <b>negative control lentivirus with different markers</b> : serves as the negative control of lentivirus treatment, for validation of the specificity of any lentivirus target expression effects.



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