

## Jurkat / GFP Stable Cell Line

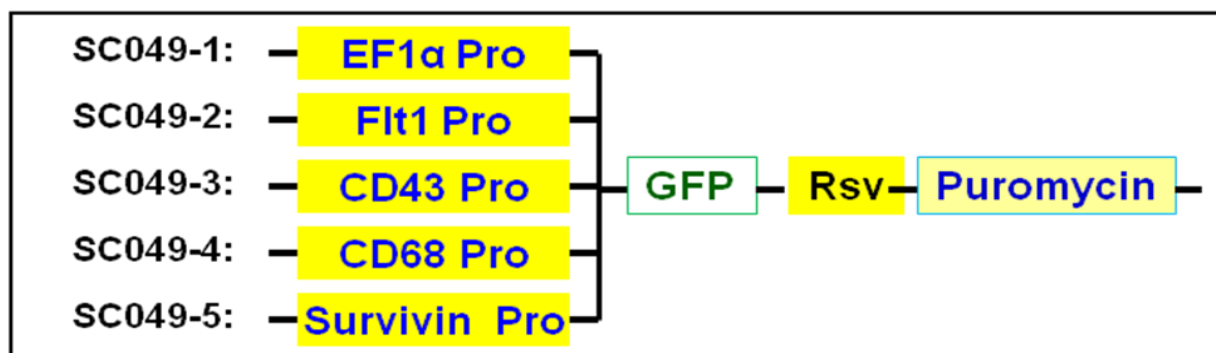
CAT#	Product	Amount
<a href="#">SC049-1</a>	Jurkat / GFP Stable Cell (EF1a Promoter)	1 vial of cells (2~8 x 10 <sup>6</sup> cells) in 90% completed medium and 10% DMSO
<a href="#">SC049-2</a>	Jurkat / GFP Stable Cell (Flt1 Promoter)	
<a href="#">SC049-3</a>	Jurkat / GFP Stable Cell (CD34 Promoter)	
<a href="#">SC049-4</a>	Jurkat / GFP Stable Cell (CD68 Promoter)	
<a href="#">SC049-5</a>	Jurkat / GFP Stable Cell (Survivin Promoter)	

### Product Description

Jurkat cells are an immortalized line of human T lymphocyte cells originated from human peripheral blood of with T cell leukemia. It is suspension cell culture. It is used to study acute T cell leukemia, T cell signaling, and the expression of various chemokine receptors. And it is also used to determine the mechanism of differential susceptibility of cancers to drugs and radiation as well as immunotherapy.

**Jurkat / GFP** stable cell lines are transformed from with stably expressing the signal-enhanced **GFP** fluorescent reporter. The cell lines were established by transduction with GFP expression lentivirus containing a **Puromycin** antibiotic resistant marker. GFP is constitutively expressed under a constitutive promoter, either the enhance **EF1a** or a native promoter of gene: **Flt1** or **CD34** or **CD68** or **Survivin**. As a result, five Jurkat-GFP cell lines were generated with different GFP expression levels under five different promoters. Jurkat-GFP cell lines are resistant to the puromycin selection marker. The following expression construct was integrated into each cell's genome.

### Core expression cassette in Jurkat-GFP cells



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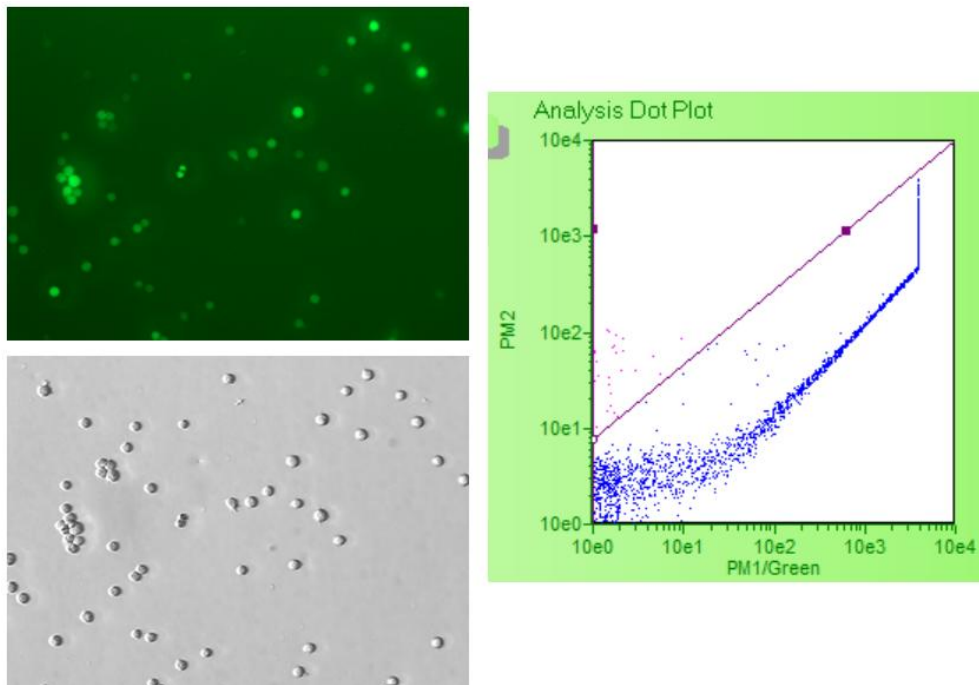


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Our enhanced EF1a promoter are strong promoter in all cell types. The native Flt1 promoter is preferably expressed in endothelial, such as tumor vasculature. The CD43's Promoter is preferably expressed in the surface of leukocytes and platelets. The CD68's Promoter is preferably expressed in macrophages and macrophage-related cells. The Survivin's Promoter is over-expressed in most common human cancers.

The Jurkat-GFP cell lines can be used to generate specific assay cell lines with GFP marker, and used for the pathway research on those specific promoters. It's GFP signal is readily visible under a fluorescent microscope or via FAC machine.

Each cell demonstrates GFP fluorescent signal under microscope (see sample image below. **GFP filter: Ex:490nm / Em:510nm.**). If sorted via FAC, 90% ~ 100% cells are GFP positive depending the assay setting. See sample images below:



### Storage

Shipped in dry-ice. Store cell line in liquid nitrogen immediately upon receipt.

### Cell recovery and Culture procedures

- Thaw the vial of frozen cells quickly in a 37 °C water bath (1-3min); Remove the vial from the water bath as soon as the contents are

thawed (or at the time contents almost fully thawed), decontaminate the outside of the vial with 75% ethanol.

- In Biological safety hood, transfer the entire contents of the vial to a T-75 cm<sup>2</sup> flask containing 15 ml of pre-warmed complete medium. Incubate the cells in a 37 °C incubator in 5% CO<sub>2</sub> (Do not add puromycin).
- Continue incubate the cells and monitor cell density.
- Pass cells (1:3 dilution) when the culture reaches  $1 \times 10^6$  cells/ml.
- After cells have recovered from the 1st passage, the cells will doubled in every 3 ~ 4 days. Now, optionally, you can add 0.1 to 0.5 ug/ml of final puromycin (depend on the puromycin brand). Do not allow the cell density to exceed  $3 \times 10^6$  cells/ml.
- For frozen re-stock the cells: Spin cell culture at 1500rpm for 5min (Do not exceed 1500 rpm speed), remove the supernatant, resuspended cell pellet in 90% complete medium and 10% DMSO, to a density of  $1 \sim 5 \times 10^6$  cells/ml. Freeze cell vials (1ml/each) in liquid Nitrogen. Cells stored in liquid nitrogen should be stable for years.

### **Complete medium**

RPMI 1640  
10% heat-inactivated Fetal Bovine Serum (FBS)  
2mM L-Glutamine,  
1.5 g/L sodium biocarbonate,  
4.5 g/L glucose;  
10 mM HEPES  
1 mM sodium pyruvate  
1% Pen-strep

### **Quality Control**

Each vial contains  $\sim 2 \times 10^6$  cells with >95% viability before freezing. Cells are verified to be free of bacteria, viruses, and mycoplasma.

### **Warranty and user terms**

- This product is warranted to perform as described, provided the cell have been properly stored and handled according to 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.

- By purchasing this cell line product, the buyer is granted a non-transferable, non-exclusive license to use the product. The buyer agrees the terms and conditions of this limited use license. This product is sold **for research and development purposes only**.
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- AMSBIO is not liable, and does not have any responsibility or liability, whatsoever for any direct and indirect, consequential, or other damages resulting from using this Product.

**Attachment:** AMSBIO's pre-made stable cell line list

Catalog #	Product Name
<a href="#"><u>SC001</u></a>	HEK293-GFP stable cells
<a href="#"><u>SC002-Bsd</u></a>	luciferase (firefly), HEK293 stable cells (Blasticidin)
<a href="#"><u>SC002-GB</u></a>	luciferase (firefly), HEK293 stable cells (GFP-Blasticidin)
<a href="#"><u>SC002-GP</u></a>	luciferase (firefly), HEK293 stable cells (GFP-Puromycin)
<a href="#"><u>SC002-Neo</u></a>	luciferase (firefly), HEK293 stable cells (Neomycin)
<a href="#"><u>SC002-Puro</u></a>	luciferase (firefly), HEK293 stable cells (Puromycin)
<a href="#"><u>SC002-RB</u></a>	luciferase (firefly), HEK293 stable cells (RFP, Blasticidin)
<a href="#"><u>SC002-RP</u></a>	luciferase (firefly), HEK293 stable cells (RFP-Puromycin)

<a href="#"><b>SC003</b></a>	LacZ stable cells
<a href="#"><b>SC004-Bsd</b></a>	CRE stable cells with Puromycin marker
<a href="#"><b>SC004-GP</b></a>	CRE stable cells with GFP-Puromycin dual marker
<a href="#"><b>SC004-Neo</b></a>	CRE stable cells with Puromycin marker
<a href="#"><b>SC004-Puro</b></a>	CRE stable cells with Puromycin marker
<a href="#"><b>SC004-RB</b></a>	CRE stable cells with RFP-blasticidin dual marker
<a href="#"><b>SC004-RP</b></a>	CRE stable cells with RFP-Puromycin dual marker
<a href="#"><b>SC005-Bsd</b></a>	HEK293-TetR (Bsd)
<a href="#"><b>SC005-GB</b></a>	HEK293-TetR (GFP-Bsd)
<a href="#"><b>SC005-Hygro</b></a>	HEK293-TetR (Hygro)
<a href="#"><b>SC005-Neo</b></a>	HEK293-TetR (Neo)
<a href="#"><b>SC005-Puro</b></a>	HEK293-TetR (Puro)
<a href="#"><b>SC005-RB</b></a>	HEK293-TetR (RFP-Bsd)
<a href="#"><b>SC005-RP</b></a>	HEK293-TetR (RFP-Puro)
<a href="#"><b>SC006</b></a>	Flp recombinase expression HEK293 stable cell
<a href="#"><b>SC007</b></a>	HEK293-RFP stable cells
<a href="#"><b>SC008</b></a>	GFP-LacZ & RFP stable cells
<a href="#"><b>SC009</b></a>	GFP & RFP HEK293 stable cells
<a href="#"><b>SC010</b></a>	HEK293-CFP stable cells
<a href="#"><b>SC011</b></a>	HEK293-YFP stable cells
<a href="#"><b>SC012</b></a>	TAT stable cells
<a href="#"><b>SC013</b></a>	Glutamine Synthesis stable cells
<a href="#"><b>SC014</b></a>	Inducible h P53 stable cells
<a href="#"><b>SC015</b></a>	h OCT3/4 stable cells

<b><u>SC016</u></b>	h LIN28 stable cells
<b><u>SC018-Bsd</u></b>	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Bsd)
<b><u>SC018-Neo</u></b>	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Neo)
<b><u>SC018-Puro</u></b>	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Puro)
<b><u>SC020-Puro</u></b>	luciferase (Renilla), HEK293 stable cells (Puromycin)
<b><u>SC020-RP</u></b>	luciferase (Renilla), HEK293 stable cells (RFP-Puromycin)
<b><u>SC021-GB</u></b>	Luciferase (firefly) and CRE co-expression stable cell line (GFP-Blasticidin)
<b><u>SC021-Puro</u></b>	Luciferase (firefly) and CRE co-expression stable cell line (puromycin)
<b><u>SC021-RP</u></b>	Luciferase (firefly) and CRE co-expression stable cell line (RFP-puromycin)
<b><u>SC022-RB</u></b>	HEK293-CFTR cell line with RFP and Blasticidin dual marker
<b><u>SC023-RB</u></b>	HEK293-CLCN2 cell line with RFP and Blasticidin dual marker
<b><u>SC024-RB</u></b>	HEK293-TRPC3 cell line with RFP and Puromycin dual marker
<b><u>SC025-RB</u></b>	HEK293-KCNN4 cell line with RFP and Puromycin dual marker
<b><u>SC026-RB</u></b>	HEK293-ATP2B2 cell line with RFP and Puromycin dual marker
<b><u>SC027-RB</u></b>	HEK293-TRPV1 cell line with RFP and Puromycin dual marker
<b><u>SC028</u></b>	Inducible RFP HEK293 stable cell line

<a href="#"><b><u>SC029</u></b></a>	inducible RFP HEK293 stable cell line with GFP marker
<a href="#"><b><u>SC030</u></b></a>	inducible GFP HEK293 stable cell line with RFP marker
<a href="#"><b><u>SC031-Puro</u></b></a>	Hela-RFP stable cells
<a href="#"><b><u>SC032-Bsd</u></b></a>	Luciferase (firefly), Hela stable cells (Blasticidin)
<a href="#"><b><u>SC032-GB</u></b></a>	Luciferase-2A-GFP, Hela stable cells (Blasticidin)
<a href="#"><b><u>SC032-GN</u></b></a>	Luciferase-2A-GFP, Hela stable cells (Neomycin)
<a href="#"><b><u>SC032-GP</u></b></a>	Luciferase-2A-GFP, Hela stable cells (Puromycin)
<a href="#"><b><u>SC032-Puro</u></b></a>	Luciferase (firefly), Hela stable cells (Puromycin)
<a href="#"><b><u>SC032-RB</u></b></a>	Luciferase-2A-RFP, Hela stable cells (Blasticidin)
<a href="#"><b><u>SC032-RN</u></b></a>	Luciferase-2A-RFP, Hela stable cells (Neomycin)
<a href="#"><b><u>SC032-RP</u></b></a>	Luciferase-2A-RFP, Hela stable cells (Puromycin)
<a href="#"><b><u>SC033</u></b></a>	Inducible GFP HEK293 stable cell line
<a href="#"><b><u>SC034-Bsd</u></b></a>	Hela-GFP stable cells (Blasticidin)
<a href="#"><b><u>SC034-Puro</u></b></a>	Hela-GFP stable cells (Puromycin)
<a href="#"><b><u>SC035-Puro</u></b></a>	Hela-TetR (Puro) stable cells
<a href="#"><b><u>SC036</u></b></a>	Inducible GFP Hela stable cell line

<a href="#"><b>SC037</b></a>	Inducible RFP Hela stable cell line
<a href="#"><b>SC038-GB</b></a>	Hela-rtTA (GFP-Bsd) stable cells
<a href="#"><b>SC038-GP</b></a>	Hela-rtTA (GFP-Puro) stable cells
<a href="#"><b>SC038-RB</b></a>	Hela-rtTA (RFP-Bsd) stable cells
<a href="#"><b>SC039-Bsd</b></a>	CHO-GFP stable cells (Blasticidin)
<a href="#"><b>SC039-Puro</b></a>	CHO-GFP stable cells (Puromycin)
<a href="#"><b>SC040-Bsd</b></a>	MDA-MB-231 / GFP (Bsd) Stable Cell Line
<a href="#"><b>SC040-Puro</b></a>	MDA-MB-231 / GFP (Puro) Stable Cell Line
<a href="#"><b>SC040-TetR</b></a>	MDA-MB-231 / TetR (Puro) stable cells
<a href="#"><b>SC041</b></a>	MDA-MB-231 / Luciferase-2A-RFP Stable Cell Line
<a href="#"><b>SC042</b></a>	SH-SY5Y / GFP (Puromycin) stable cell line
<a href="#"><b>SC043-Bsd</b></a>	A549 / GFP stable cells (Blasticidin)
<a href="#"><b>SC043-Cas9-GP</b></a>	A549 / Cas9 (GFP-Puro) Stable Cell Line
<a href="#"><b>SC043-Cas9-Puro</b></a>	A549 / Cas9 (Puro) Stable Cell Line
<a href="#"><b>SC043-Cas9-RP</b></a>	A549 / Cas9 (RFP-Puro) Stable Cell Line
<a href="#"><b>SC043-LG</b></a>	A549 / Luciferase-2A-GFP (Puromycin) stable cell line
<a href="#"><b>SC043-Luc</b></a>	A549 / Luciferase (Puromycin) stable cell line
<a href="#"><b>SC043-TetR</b></a>	A549 / TetR (Puro) stable cells
<a href="#"><b>SC044</b></a>	MDA-MB-231 / Luciferase-2A-GFP Stable Cell Line
<a href="#"><b>SC045-Cas9-Bsd</b></a>	Hela / Cas9 (Bsd) Stable Cell Line
<a href="#"><b>SC046</b></a>	SH-SY5Y / RFP (Puromycin) stable cell line
<a href="#"><b>SC047-GB</b></a>	RKO / GFP Stable Cell Line (Blasticidin)
<a href="#"><b>SC047-TetR</b></a>	RKO / TetR (Bsd) Stable Cell Line



<a href="#"><u>SC048</u></a>	Jurkat T Cell /Firefly Luciferase (Puro) Stable Cell line
<a href="#"><u>SC049-1</u></a>	Jurkat T / GFP Stable Cell (EF1a Promoter)
<a href="#"><u>SC049-2</u></a>	Jurkat T / GFP Stable Cell (Flt1 Promoter)
<a href="#"><u>SC049-3</u></a>	Jurkat T / GFP Stable Cell (CD34 Promoter)
<a href="#"><u>SC049-4</u></a>	Jurkat T / GFP Stable Cell (CD68 Promoter)
<a href="#"><u>SC049-5</u></a>	Jurkat T / GFP Stable Cell (Survivin Promoter)
<a href="#"><u>TLV-C</u></a>	HEK293-TLV lentivirus packing cells

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