



## Human U2OS Reporter Cell Lines

Catalog Number	Product Name	Amount
<a href="#">SC084-G</a>	Human U2OS / <b>GFP</b> Stable Cells	1.0 ml / vial (3 x 10 <sup>6</sup> cells)
<a href="#">SC084-Luc</a>	Human U2OS / <b>Luciferase</b> Stable Cells	
<a href="#">SC084-LG</a>	Human U2OS / <b>Luciferase</b> & <b>GFP</b> Stable Cells	in completed medium

### Product Description

#### 1. Introduction:

Human Bone Osteosarcoma Epithelial Cells (**U2OS**) is an established human epithelial cell line isolated back in the 1960s from a 15 year old female suffering from bone cancer or osteosarcoma. U2OS cells exhibit epithelial adherent morphology. Cells are positive for IGF-I) and IGF II receptors and express a number of antigens, including blood type A, Rh+, HLA A2, Aw30, B12, Bw35, and B40(+/-).

The U2OS cell line is extensively used as a circadian rhythm model, including in high-throughput screening studies.

Gentarget generates the reporter cell lines from this **human U2OS** host cells, transformed by lentivirus transduction, selected under the **Puromycin** (Puro) resistance. Those reporter cell lines can be tracked in vivo by fluorescent signal or / and chem-luminescence (*In Vivo* imaging), providing convenient tools for studying the mechanisms of tumor growth and metastasis, and as the therapeutic model for evaluating various treatment effects in animal.

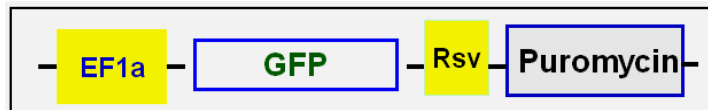
Each cell line stably the enhanced Green fluorescent reporter (e**GFP**), or codon optimized **Firefly Luciferase** (III), or co-expresses **firefly luciferase** and **GFP** fluorescent dual reporters, under the same **EF1a** promoter.

#### 2. Expression Cassettes:

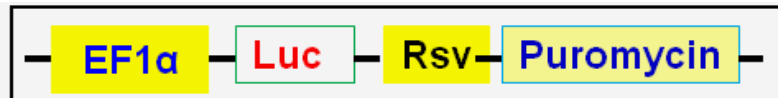


The report(s) is constitutively expressed at high levels under the enhance EF1a promoter. The co-expression of florescent reporter and Luciferase was mediated by F2A element. The expression cassette was integrated into each cell's genome (see the scheme below).

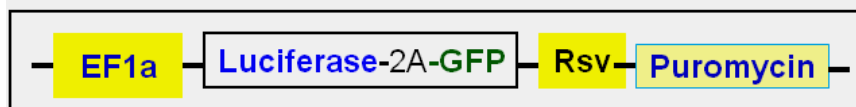
SC084-G:



SC084-Luc:

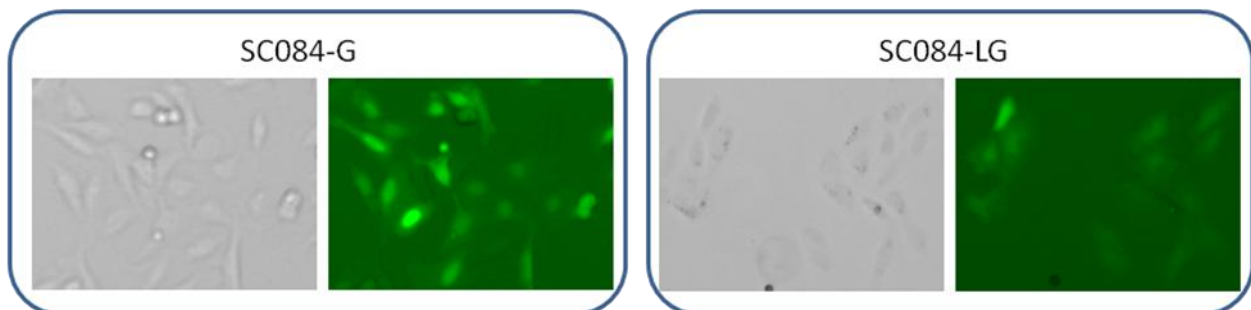


SC084-LG:



### 3. Sample images:

For the Fluorescent report cell line: each cell demonstrated strong GFP Fluorescent signal, visualized under fluorescent-microscope, at filter wavelength of Ex/EM: 460nm/ 525nm (GFP). (See sample images below).



**Note:** This cell lines are the pool of multiple cell clones and the fluorescent signal intensity may be different among cells.

For **SC084-Luc** and **SC084-LG** cell lines: they were verified expressing high level of firefly luciferae reporter. Their chem-luminescence signal can be



detected, *in vitro* and *in vivo*, via luciferase assay using the D-luciferin substrate. The RLU readout level is dependent the luc assay kit.

## 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 T-75 cm<sup>2</sup> flask containing 20 ml of pre-warmed complete medium. Incubate the cells overnight in a 37°C incubator, with 5% CO<sub>2</sub>.
3. On the following day, replace the medium with 20 ml of prewarmed, complete medium.
4. Incubate the cells and monitor cell density.
5. Pass cells (1:5 to 1:10 dilution) using 0.25% Trypsin-EDTA solution when the culture reaches ~90% confluent.
6. Freeze cells at a density of ~3 x 10<sup>6</sup> cells/ml using 90% complete medium with 10% DMSO.

## Complete medium

McCoy's 5a Medium  
2mM L-glutamine  
10% Fetal Bovine Serum (FBS)  
Pen/Strep or 1x Antibiotic-Antimycotic

**Note:** culture cell at 37°C incubator with 5% CO<sub>2</sub>.

- Optional to add: final **0.6 ug/ml** of Puromycin (Note: do not add puromycin at 1st thaw culture. This final Puromycin concentration is also depend on the potency of the puromycin brand.

## Quality Control

Each vial contains ~2 x 10<sup>6</sup> cells with >95% viability before freezing. Cells are verified to be free of bacteria, viruses, and mycoplasma.

## Warranty and user terms

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5. GenTarget 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.
6. Gentarget **do not** provide the protected reporter's sequences information for all our cell line products unless a license was purchased.

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

<b>Catalog #</b>	<b>Product Name</b>
<a href="#">TLV-C</a>	HEK293-TLV lentivirus packing cells
<a href="#">SC001</a>	HEK293-GFP stable cells
<a href="#">SC002-Bsd</a>	luciferase (firefly), HEK293 stable cells (Blasticidin)
<a href="#">SC002-GB</a>	luciferase (firefly), HEK293 stable cells (GFP-Blasticidin)
<a href="#">SC002-GP</a>	luciferase (firefly), HEK293 stable cells (GFP-Puromycin)
<a href="#">SC002-Neo</a>	luciferase (firefly), HEK293 stable cells (Neomycin)
<a href="#">SC002-Puro</a>	luciferase (firefly), HEK293 stable cells (Puromycin)
<a href="#">SC002-RB</a>	luciferase (firefly), HEK293 stable cells (RFP, Blasticidin)
<a href="#">SC002-RP</a>	luciferase (firefly), HEK293 stable cells (RFP-Puromycin)
<a href="#">SC002T-RP</a>	HEK293T / Luciferase stable cells (RFP-Puromycin)



<a href="#">SC003</a>	LacZ (6His, RFP) / HEK293 Expression stable cell line
<a href="#">SC004-Bsd</a>	CRE Expression / HEK293 Cell Line (Bsd)
<a href="#">SC004-GP</a>	CRE Expression / HEK293 Cell Line (GFP, Puro)
<a href="#">SC004-Neo</a>	CRE Expression / HEK293 Cell Line (Neo)
<a href="#">SC004-Puro</a>	CRE Expression / HEK293 Cell Line (Puro)
<a href="#">SC004-RB</a>	CRE Expression / HEK293 Cell Line (RFP, Bsd)
<a href="#">SC004-RP</a>	CRE Expression / HEK293 Cell Line (RFP, Puro)
<a href="#">SC005-Bsd</a>	HEK293-TetR (Bsd)
<a href="#">SC005-GB</a>	HEK293-TetR (GFP-Bsd)
<a href="#">SC005-Hygro</a>	HEK293-TetR (Hygro)
<a href="#">SC005-Neo</a>	HEK293-TetR (Neo)
<a href="#">SC005-Puro</a>	HEK293-TetR (Puro)
<a href="#">SC005-RB</a>	HEK293-TetR (RFP-Bsd)
<a href="#">SC005-RP</a>	HEK293-TetR (RFP-Puro)
<a href="#">SC006</a>	Flp recombinase Expression HEK293 stable cell
<a href="#">SC007</a>	HEK293-RFP stable cells
<a href="#">SC008</a>	GFP-LacZ & RFP Expression HEK293 Cell Line
<a href="#">SC009</a>	GFP & RFP / HEK293 stable cells
<a href="#">SC010</a>	HEK293-CFP stable cells
<a href="#">SC011</a>	HEK293-YFP stable cells
<a href="#">SC012</a>	TAT Expression / HEK293 Cell Line
<a href="#">SC013</a>	Glutamine Synthetase (6His) Expression HEK293 Cell Line
<a href="#">SC014</a>	human P53 Inducible Expression Cell line
<a href="#">SC015</a>	Human OCT3/4 Expression Stable cells



<a href="#">SC016</a>	Human LIN28 Expression stable cells
<a href="#">SC017</a>	MDA-MB-231 / niRFP (Puro) Stable Cell Line
<a href="#">SC018-Bsd</a>	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Bsd)
<a href="#">SC018-Neo</a>	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Neo)
<a href="#">SC018-Puro</a>	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Puro)
<a href="#">SC019</a>	Firefly & Renilla Dual Luciferase Hela Cell Line
<a href="#">SC020-Puro</a>	luciferase (Renilla), HEK293 stable cells (Puromycin)
<a href="#">SC020-RP</a>	luciferase (Renilla), HEK293 stable cells (RFP-Puromycin)
<a href="#">SC021-GB</a>	Luciferase (firefly) & CRE Expression cell line (GFP-Bsd)
<a href="#">SC021-Puro</a>	Luciferase (firefly) & CRE Expression stable cell line (Puro)
<a href="#">SC021-RP</a>	Luciferase (firefly) & CRE Expression cell line (RFP-Puro)
<a href="#">SC022-RB</a>	HEK293-CFTR cell line with RFP and Blastocidin dual marker
<a href="#">SC023-RB</a>	HEK293-CLCN2 cell line with RFP and Blastocidin dual marker
<a href="#">SC024-RB</a>	HEK293-TRPC3 cell line with RFP and Puromycin dual marker
<a href="#">SC025-RB</a>	HEK293-KCNN4 cell line with RFP and Puromycin dual marker
<a href="#">SC026-RB</a>	HEK293-ATP2B2 cell line with RFP and Puromycin dual marker
<a href="#">SC027-RB</a>	HEK293-TRPV1 cell line with RFP and Puromycin dual marker
<a href="#">SC028</a>	Inducible RFP HEK293 Expression cell line
<a href="#">SC029</a>	inducible RFP HEK293 stable cell line with GFP marker
<a href="#">SC030</a>	inducible GFP HEK293 stable cell line with RFP marker
<a href="#">SC031-Puro</a>	Hela-RFP Expression Cells
<a href="#">SC032-Bsd</a>	Luciferase (firefly) Expression Hela cells (Bsd)
<a href="#">SC032-GB</a>	Luciferase & GFP Expression Hela cells (Bsd)



<a href="#">SC032-GN</a>	Luciferase & GFP Expression Hela cells (Neo)
<a href="#">SC032-GP</a>	Luciferase & GFP Expression Hela cells (Puro)
<a href="#">SC032-Puro</a>	Luciferase (firefly) Expression Hela cells (Puro)
<a href="#">SC032-RB</a>	Luciferase & RFP Expression Hela cells (Bsd)
<a href="#">SC032-RN</a>	Luciferase & RFP Expression Hela cells (Neo)
<a href="#">SC032-RP</a>	Luciferase & RFP Expression Hela cells (Puro)
<a href="#">SC033</a>	Inducible GFP HEK293 stable cell line
<a href="#">SC034-Bsd</a>	Hela-GFP stable cells (Blasticidin)
<a href="#">SC034-Puro</a>	Hela-GFP stable cells (Puromycin)
<a href="#">SC035-Puro</a>	TetR Expression (Puro) / Hela stable cells
<a href="#">SC036</a>	Inducible GFP Expression Hela cell line
<a href="#">SC037</a>	Inducible RFP Expression Hela cell line
<a href="#">SC038-GB</a>	rtTA (GFP-Bsd) / Hela stable cells
<a href="#">SC038-GP</a>	rtTA (GFP-Puro) / Hela stable cells
<a href="#">SC038-RB</a>	rtTA (RFP-Bsd) / Hela stable cells
<a href="#">SC039-Bsd</a>	CHO-GFP stable cells (Blasticidin)
<a href="#">SC039-Puro</a>	CHO-GFP stable cells (Puromycin)
<a href="#">SC040-Bsd</a>	MDA-MB-231 / GFP (Bsd) Stable Cell Line
<a href="#">SC040-Puro</a>	MDA-MB-231 / GFP (Puro) Stable Cell Line
<a href="#">SC040-TetR</a>	MDA-MB-231 / TetR (Puro) stable cells
<a href="#">SC041</a>	MDA-MB-231 / Luciferase-2A-RFP Stable Cell Line
<a href="#">SC042</a>	SH-SY5Y / GFP (Puromycin) stable cell line
<a href="#">SC043-Bsd</a>	A549 / GFP stable cells (Blasticidin)
<a href="#">SC043-Cas9-GP</a>	A549 / Cas9 (GFP-Puro) Stable Cell Line



<a href="#">SC043-Cas9-Puro</a>	A549 / Cas9 (Puro) Stable Cell Line
<a href="#">SC043-Cas9-RP</a>	A549 / Cas9 (RFP-Puro) Stable Cell Line
<a href="#">SC043-LG</a>	A549 / Luciferase-2A-GFP (Puromycin) stable cell line
<a href="#">SC043-Luc</a>	A549 / Luciferase (Puromycin) stable cell line
<a href="#">SC043-TetR</a>	A549 / TetR (Puro) stable cells
<a href="#">SC044</a>	MDA-MB-231 / Luciferase-2A-GFP Stable Cell Line
<a href="#">SC045-Cas9-Bsd</a>	Hela / Cas9 (Bsd) Stable Cell Line
<a href="#">SC045-Cas9-Puro</a>	Hela / Cas9 (Puro) Stable Cell Line
<a href="#">SC046</a>	SH-SY5Y / RFP (Puromycin) stable cell line
<a href="#">SC047-GB</a>	RKO / GFP (Blasticidin) Stable Cell Line
<a href="#">SC047-TetR</a>	TetR Expression (Bsd) / RKO stable cells
<a href="#">SC048</a>	Luciferase (Puro) / Jurkat T Cell line
<a href="#">SC049-1</a>	Jurkat T / GFP Stable Cell (EF1a Promoter)
<a href="#">SC049-2</a>	Jurkat T / GFP Stable Cell (Flt1 Promoter)
<a href="#">SC049-3</a>	Jurkat T / GFP Stable Cell (CD43 Promoter)
<a href="#">SC049-4</a>	Jurkat T / GFP Stable Cell (CD68 Promoter)
<a href="#">SC049-5</a>	Jurkat T / GFP Stable Cell (Survivin Promoter)
<a href="#">SC050-G</a>	MCF7 / GFP (Puromycin) Cell Line
<a href="#">SC050-L</a>	MCF7 / Firefly Luciferase (Puro) Cell Line
<a href="#">SC051-G</a>	ZR-75-1 / GFP (Puromycin) Cell Line
<a href="#">SC051-L</a>	ZR-75-1 / Firefly Luciferase (Puro) Cell Line
<a href="#">SC053-L</a>	NCI-H1299 / Luciferase (Puro) Stable Cells
<a href="#">SC054-L</a>	CFPAC-1 / Luciferase (Puro) Stable Cells
<a href="#">SC055-G</a>	MLLB2 / GFP (Neomycin) stable cell line





<a href="#">SC056-TetR</a>	mouse CT26 / TetR Expression (Bsd) stable cells
<a href="#">SC057-Bsd</a>	MDA-MB-231 / RFP (Bsd) Stable Cell Line
<a href="#">SC058</a>	HEK293 / uGFP (unstable GFP) Stable Cells
<a href="#">SC059-Bsd</a>	MDA-MB-231 / Luciferase (Bsd) Stable Cell Line
<a href="#">SC059-Puro</a>	MDA-MB-231 / Luciferase (Puro) Stable Cell Line
<a href="#">SC060-G</a>	Human B lymphocyte / GFP Stable Cells
<a href="#">SC060-LG</a>	Human B lymphocyte (Luciferase / GFP) Stable Cells
<a href="#">SC060-LR</a>	Human B lymphocyte (Luciferase / RFP) Stable Cells
<a href="#">SC060-R</a>	Human B lymphocyte / RFP Stable Cells
<a href="#">SC061-G</a>	Mouse CT26 / GFP Stable Cells
<a href="#">SC061-LG</a>	Mouse CT26 (Luciferase & GFP) Stable Cells
<a href="#">SC061-LR</a>	Mouse CT26 (Luciferase & RFP) Stable Cells
<a href="#">SC061-PDL1</a>	Mouse CT26 / PDL1 Stable Cells
<a href="#">SC061-R</a>	Mouse CT26 / RFP Stable Cells
<a href="#">SC062-G</a>	Human AsPC1 / GFP Cell Line
<a href="#">SC062-LG</a>	Human AsPC1 / Luciferase and GFP Cell Line
<a href="#">SC062-LR</a>	Human AsPC1 / Luciferase and RFP Cell Line
<a href="#">SC062-Luc</a>	Human AsPC1 / Luciferase Cell Line
<a href="#">SC062-R</a>	Human AsPC1 / RFP Cell Line
<a href="#">SC063-LR</a>	Mouse B lymphocyte (Luciferase & RFP) Stable Cell
<a href="#">SC063-Luc</a>	Mouse B lymphocyte / Luciferase Cell Line
<a href="#">SC063-R</a>	Mouse B lymphocyte / RFP Cell Line
<a href="#">SC065-G</a>	Mouse MB49 / GFP Stable Cells
<a href="#">SC065-LG</a>	Mouse MB49 / Luciferase & GFP Stable Cells



<a href="#">SC065-LR</a>	Mouse MB49 / Luciferase & RFP Stable Cells
<a href="#">SC065-R</a>	Mouse MB49 / RFP Stable Cells
<a href="#">SC066-G</a>	Human ES2 / GFP Stable Cells
<a href="#">SC066-LG</a>	Human ES2 / Luciferase & GFP Stable Cells
<a href="#">SC066-LR</a>	Human ES2 / Luciferase & RFP Stable Cells
<a href="#">SC066-R</a>	Human ES2 / RFP Stable Cells
<a href="#">SC066-TetR</a>	Human ES2 / TetR (Puro) Stable Cells
<a href="#">SC067-G</a>	Human SW403 / GFP Stable Cells
<a href="#">SC067-Luc</a>	Human SW403 / Luciferase Stable Cells
<a href="#">SC068-G</a>	Human PANC-1 / GFP (Puro) Cell Line
<a href="#">SC068-LG</a>	Human PANC-1 / Luciferase & GFP (Puro) Cell Line
<a href="#">SC068-Luc</a>	Human PANC-1 / Luciferase (Puro) Cell Line
<a href="#">SC068-R</a>	Human PANC-1 / RFP (Puro) Cell Line
<a href="#">SC069-G</a>	Human 786-O / GFP Cell Line
<a href="#">SC069-LG</a>	Human 786-O / Luciferase & GFP Cell Line
<a href="#">SC069-luc</a>	Human 786-O / Luciferase Cell Line
<a href="#">SC070-G</a>	Hela-nucGFP stable cells
<a href="#">SC070-R</a>	Hela-nucRFP stable cells
<a href="#">SC071-Neo</a>	Color Switch, CRE report cell line: Hela-loxP-GFP-RFP (Neo)
<a href="#">SC071-Puro</a>	Color Switch, CRE report cell line: Hela-loxP-GFP-RFP (Puro)
<a href="#">SC072-G</a>	Human T47D / GFP Stable Cells
<a href="#">SC072-LG</a>	Human T47D / Luciferase & GFP Stable Cells
<a href="#">SC072-Luc</a>	Human T47D / Luciferase Stable Cells



<a href="#">SC073-GB</a>	Human MCF10A / GFP (Bsd) Stable Cells
<a href="#">SC073-GP</a>	Human MCF10A / GFP (Puro) Stable Cells
<a href="#">SC073-Luc</a>	Human MCF10A / Luciferase (Puro) Stable Cells
<a href="#">SC074-GB</a>	Human SW1990 / GFP (Bsd) Stable Cells
<a href="#">SC074-GP</a>	Human SW1990 / GFP (Puro) Stable Cells
<a href="#">SC074-LG</a>	Human SW1990 / Luciferase & GFP (Puro) Stable Cells
<a href="#">SC074-Luc</a>	Human SW1990 / Luciferase (Puro) Stable Cells
<a href="#">SC075</a>	Human ACE2 (RFP) Expression in Hela Cell Line
<a href="#">SC076</a>	Human ACE2 (RFP) Expression in HEK293T Cell Line
<a href="#">SC076B</a>	Human ACE2 (GFP) Expression in Hela Cell Line
<a href="#">SC077</a>	COVID-19 Spike (S) Protein / Hela Cell Line
<a href="#">SC078-G</a>	Mouse Panc02 / GFP Stable Cell Line
<a href="#">SC078-Luc</a>	Mouse Panc02 / Luciferase (Firefly) Stable Cell Line
<a href="#">SC079-G</a>	Human MIA Paca-2 / GFP Stable Cells
<a href="#">SC079-LG</a>	Human MIA Paca-2 / Luciferase & GFP Stable Cells
<a href="#">SC079-LR</a>	Human MIA Paca-2 / Luciferase & RFP Stable Cells
<a href="#">SC079-Luc</a>	Human MIA Paca-2 / Luciferase Stable Cells
<a href="#">SC079-R</a>	Human MIA Paca-2 / RFP Stable Cells
<a href="#">SC080-G</a>	Human HT-29 / GFP Stable Cell Line
<a href="#">SC080-LG</a>	Human HT-29 / GFP & Luciferase Stable Cell Line
<a href="#">SC080-Luc</a>	Human HT-29 / Luciferase (Firefly) Stable Cell Line
<a href="#">SC081</a>	Inducible GFP & Luciferase Co-Expression HEK293 cell line
<a href="#">SC082</a>	HEK293 / Cas9 Expression Stable Cell Line
<a href="#">SC083</a>	HEK293 / h PDL1 Expression Stable Cells



<a href="#">SC084-G</a>	Human U2OS / GFP Stable Cells
<a href="#">SC084-LG</a>	Human U2OS / Luciferase & GFP Stable Cells
<a href="#">SC084-Luc</a>	Human U2OS / Luciferase Stable Cells
<a href="#">SC085-LG</a>	Human SHP-77 / <b>Luciferase</b> & <b>GFP</b> Stable Cells
<a href="#">SC085-LR</a>	Human SHP-77 / <b>Luciferase</b> & <b>RFP</b> Stable Cells
<a href="#">SC085-Luc</a>	Human SHP-77 / <b>Luciferase</b> Stable Cells
<a href="#">SC085-R</a>	Human SHP-77 / <b>RFP</b> Fluorescent Stable Cells
<a href="#">SC086</a>	CHO / CD19 & GFP Expression Stable Cell Line
<a href="#">SC087</a>	HEK293 / human CD19 Expression Stable Cell Line