



## Human CD19 and GFP Expression/ CHO Stable Cell Line

Catalog Number	Name	Amount
<a href="#">SC086</a>	CHO / CD19 & GFP Expression Stable Cell Line	1 vial of cells (2 x 10 <sup>6</sup> cells)

### Introduction

The CHO cell line was an adherent epithelial cells derived from an ovary of an adult Chinese hamster in 1957. It is often used in biological and medical research and commercially in the production of therapeutic proteins. They are grown as a cultured monolayer and require the amino acid proline in their culture medium due to the absence of the gene for proline synthesis.

Human B-lymphocyte antigen CD19 gene is a transmembrane protein, also known as CD19 molecule, B-Lymphocyte Surface Antigen B4, T-Cell Surface Antigen Leu-12 and CVID3. CD19 is expressed in all B lineage cells. CD19 is widely expressed during all phases of B cell development until terminal differentiation into plasma cells. It is a biomarker for B lymphocyte development, lymphoma diagnosis and can be utilized as a target for leukemia immunotherapies, such as the target cells for Anti-CD19 CAR T cell killing assay.

### Product Description

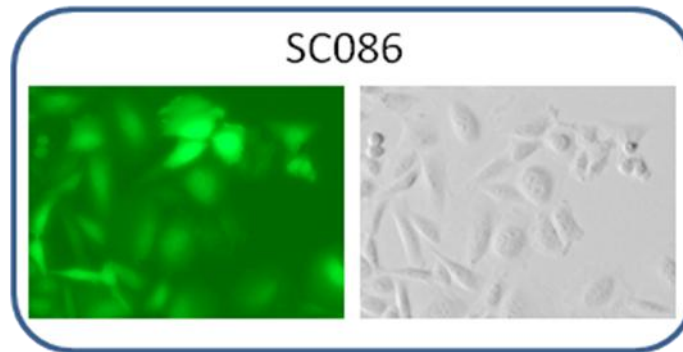
This cell line is transformed from CHO K1 cell line (Chinese Hamster Ovary), expressing human B-lymphocyte antigen **CD19** (transcript variant 1) with codon sequence perfectly match to the CD region of human CD19, transcript variant 1 (GeneBank# [NM\\_001178098](#)), under the enhanced CMV promoter (suCMV).

It also stably expresses the enhanced **GFP** fluorescent protein (as GFP-Puromycin fusion dual selection), under RSV promoter. The following expression construct was integrated into the cell line's genome.





Strong Green fluorescent signal was visualized in every single cell under fluorescent microscope (GFP filter set: Ex ~490nm / Em ~525nm), see sample image below:



Human CD19 expression can be detected in Western Blot (see gel image below), or in cell based assay in Flow cytometry, using labeled anti-hCD19 antibody.



## 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 15~20 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: no need to puromycin in the medium in first thaw. Optionally, you can add puromycin, up to 20 ug/ml final concentration during cell expansion later.)
4. Incubate the cells and monitor cell density.
5. Pass cells every 3 days (1:10 dilution) when the culture reaches 80-90% confluence using 0.25% trypsin with EDTA to detach the cells.
6. Freeze cells at 1-5 x 10<sup>6</sup> cells/vial using 90% complete medium with 10% DMSO.



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## Complete medium

F12 medium  
2mM L-glutamine  
10% Fetal Bovine Serum (FBS)  
1% Pen-strep

## Quality Control

Each vial contains greater than  $2 \times 10^6$  cells with >95% viability before freezing. Cells are validated as free of bacteria, viruses, and mycoplasma.

## Warranty and user terms

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**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