



Human 786-O Reporter Cell Lines

Catalog Number	Product Name	Amount
SC069-G	Human 786-O/ GFP Cell Line	1.0 ml / vial (3~5 x 10 ⁶ cells) in cell frozen medium
SC069-luc	Human 786-O/ Luciferase Cell Line	
SC069-LG	Human 786-O/ Luciferase and GFP Cell Line	

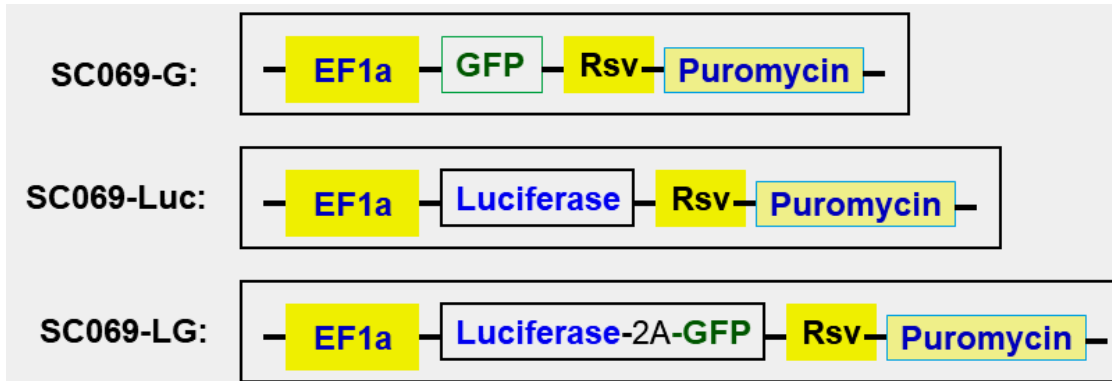
Product Description

The Human **786-O** was derived from a primary clear cell adenocarcinoma (from the kidney) of 58-years male Caucasian. 786-O is a hypertriploid renal cell carcinoma (RCC) cell line. It is used most commonly in Renal cell cancer-focused research. The 786-O line is defective in VHL expression, as it harbors mutated VHL with altered HIF and VEGF (Vascular endothelial growth factor) pathways and gives rise to clear cell tumors in nude mice. Those cells are positive for surface receptors of CD10 and vimentin, and produce high levels of VEGF. This cell line can be used to model bone metastasis after injected into nude mice to the tibia or to the cardiac ventricle. 768-O cells have homozygous p53, PTEN, and p16 (CDKN2A) mutations. Additionally, it expresses parathyroid hormone (PTH) like peptide. 786-O has proven useful in cancer stem cell studies and bone metastasis.

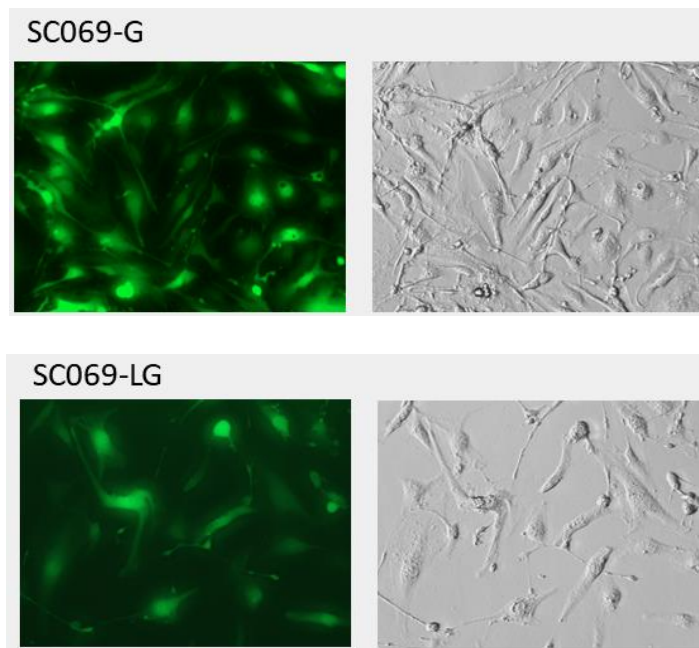
Gentarget generates three signal reporter cell lines from this human 786-O host cells, transformed by lentivirus transduction, carry a **Puromycin**-resistance. Each cell line stably expresses the firefly luciferase (**Luc**), or a fluorescent reporter (**GFP**), or co-expresses firefly luciferase and **GFP** fluorescent dual reporters (**Luc / GFP**), mediated by the 2A element under the same **EF1a** promoter.

Those reporter cell lines can be tracked in vivo by fluorescent signal / chemiluminescence, providing convenient tools for studying the mechanisms of tumor growth and metastasis, and as the therapeutic model for evaluating various treatment effects in animal.

The report(s) is constitutively expressed at high-levels under the enhance EF1a promoter. The expression cassette was integrated into each cell's genome (see the scheme below).



The GFP fluorescent signal can be visualized under fluorescent-microscope, at filter wavelength of Ex/EM: 460nm/ 525nm (GFP). (See sample image below). **Note:** This cell line is the pool of multiple cell clones and the fluorescent signal intensity may be different among cells.



For **SC069-LG** cell lines, the cells express both fluorescent reporter and the firefly luciferase whose illuminance signal can be detected, *in vitro* and *in vivo*, by luciferase assay via the D-luciferin substrate.

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 cm² flask containing 20 ml of pre-warmed complete medium. Incubate the cells overnight in a 37°C incubator, 5% CO₂.
3. 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 10⁶ cells/ml using 90% complete medium with 10% DMSO.

Complete medium

RPMI 1640
10% FBS
1 % Non Essential Amino Acids
2 mM Glutamine
1x Antibiotic-Antimycotic
(cultures at 37°C with 5% CO₂)

- Optional to add: final **1.0 ug/ml** of Puromycin (Note: do not add puromycin at 1st thaw culture. This final Puromycin concentration is also depend on the potency of puromycin)

Quality Control

Each vial contains ~2 x 10⁶ 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:

Catalog #	Product Name
SC001	HEK293-GFP stable cells
SC002-Bsd	luciferase (firefly), HEK293 stable cells (Blasticidin)
SC002-GB	luciferase (firefly), HEK293 stable cells (GFP-Blasticidin)
SC002-GP	luciferase (firefly), HEK293 stable cells (GFP-Puromycin)
SC002-Neo	luciferase (firefly), HEK293 stable cells (Neomycin)
SC002-Puro	luciferase (firefly), HEK293 stable cells (Puromycin)
SC002-RB	luciferase (firefly), HEK293 stable cells (RFP, Blasticidin)
SC002-RP	luciferase (firefly), HEK293 stable cells (RFP-Puromycin)
SC002T-RP	HEK293T / Luciferase stable cells (RFP-Puromycin)
SC003	LacZ (6His, RFP) / HEK293 Expression stable cell line
SC004-Bsd	CRE Expression / HEK293 Cell Line (Bsd)
SC004-GP	CRE Expression / HEK293 Cell Line (GFP, Puro)
SC004-Neo	CRE Expression / HEK293 Cell Line (Neo)
SC004-Puro	CRE Expression / HEK293 Cell Line (Puro)



SC004-RB	CRE Expression / HEK293 Cell Line (RFP, Bsd)
SC004-RP	CRE Expression / HEK293 Cell Line (RFP, Puro)
SC005-Bsd	HEK293-TetR (Bsd)
SC005-GB	HEK293-TetR (GFP-Bsd)
SC005-Hygro	HEK293-TetR (Hygro)
SC005-Neo	HEK293-TetR (Neo)
SC005-Puro	HEK293-TetR (Puro)
SC005-RB	HEK293-TetR (RFP-Bsd)
SC005-RP	HEK293-TetR (RFP-Puro)
SC006	Flp recombinase Expression HEK293 stable cell
SC007	HEK293-RFP stable cells
SC008	GFP-LacZ & RFP Expression HEK293 Cell Line
SC009	GFP & RFP / HEK293 stable cells
SC010	HEK293-CFP stable cells
SC011	HEK293-YFP stable cells
SC012	TAT Expression / HEK293 Cell Line
SC013	Glutamine Synthetase (6His) Expression HEK293 Cell Line
SC014	human P53 Inducible Expression Cell line
SC015	Human OCT3/4 Expression Stable cells
SC016	Human LIN28 Expression stable cells
SC018-Bsd	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Bsd)
SC018-Neo	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Neo)
SC018-Puro	Color Switch, CRE report cell line: HEK293-loxP-GFP-RFP (Puro)
SC020-Puro	luciferase (Renilla), HEK293 stable cells (Puromycin)
SC020-RP	luciferase (Renilla), HEK293 stable cells (RFP-Puromycin)
SC021-GB	Luciferase (firefly) & CRE Expression cell line (GFP-Bsd)



SC021-Puro	Luciferase (firefly) & CRE Expression stable cell line (Puro)
SC021-RP	Luciferase (firefly) & CRE Expression cell line (RFP-Puro)
SC022-RB	HEK293-CFTR cell line with RFP and Blasticidin dual marker
SC023-RB	HEK293-CLCN2 cell line with RFP and Blasticidin dual marker
SC024-RB	HEK293-TRPC3 cell line with RFP and Puromycin dual marker
SC025-RB	HEK293-KCNN4 cell line with RFP and Puromycin dual marker
SC026-RB	HEK293-ATP2B2 cell line with RFP and Puromycin dual marker
SC027-RB	HEK293-TRPV1 cell line with RFP and Puromycin dual marker
SC028	Inducible RFP HEK293 Expression cell line
SC029	inducible RFP HEK293 stable cell line with GFP marker
SC030	inducible GFP HEK293 stable cell line with RFP marker
SC031-Puro	Hela-RFP Expression Cells
SC032-Bsd	Luciferase (firefly) Expression Hela cells (Bsd)
SC032-GB	Luciferase & GFP Expression Hela cells (Bsd)
SC032-GN	Luciferase & GFP Expression Hela cells (Neo)
SC032-GP	Luciferase & GFP Expression Hela cells (Puro)
SC032-Puro	Luciferase (firefly) Expression Hela cells (Puro)
SC032-RB	Luciferase & RFP Expression Hela cells (Bsd)
SC032-RN	Luciferase & RFP Expression Hela cells (Neo)
SC032-RP	Luciferase & RFP Expression Hela cells (Puro)
SC033	Inducible GFP HEK293 stable cell line
SC034-Bsd	Hela-GFP stable cells (Blasticidin)
SC034-Puro	Hela-GFP stable cells (Puromycin)
SC035-Puro	TetR Expression (Puro) / Hela stable cells
SC036	Inducible GFP Expression Hela cell line



SC037	Inducible RFP Expression HeLa cell line
SC038-GB	rtTA (GFP-Bsd) / HeLa stable cells
SC038-GP	rtTA (GFP-Puro) / HeLa stable cells
SC038-RB	rtTA (RFP-Bsd) / HeLa stable cells
SC039-Bsd	CHO-GFP stable cells (Blasticidin)
SC039-Puro	CHO-GFP stable cells (Puromycin)
SC040-Bsd	MDA-MB-231 / GFP (Bsd) Stable Cell Line
SC040-Puro	MDA-MB-231 / GFP (Puro) Stable Cell Line
SC040-TetR	MDA-MB-231 / TetR (Puro) stable cells
SC041	MDA-MB-231 / Luciferase-2A-RFP Stable Cell Line
SC042	SH-SY5Y / GFP (Puromycin) stable cell line
SC043-Bsd	A549 / GFP stable cells (Blasticidin)
SC043-Cas9-GP	A549 / Cas9 (GFP-Puro) Stable Cell Line
SC043-Cas9-Puro	A549 / Cas9 (Puro) Stable Cell Line
SC043-Cas9-RP	A549 / Cas9 (RFP-Puro) Stable Cell Line
SC043-LG	A549 / Luciferase-2A-GFP (Puromycin) stable cell line
SC043-Luc	A549 / Luciferase (Puromycin) stable cell line
SC043-TetR	A549 / TetR (Puro) stable cells
SC044	MDA-MB-231 / Luciferase-2A-GFP Stable Cell Line
SC045-Cas9-Bsd	HeLa / Cas9 (Bsd) Stable Cell Line
SC046	SH-SY5Y / RFP (Puromycin) stable cell line
SC047-GB	RKO / GFP (Blasticidin) Stable Cell Line
SC047-TetR	TetR Expression (Bsd) / RKO stable cells
SC048	Luciferase (Puro) / Jurkat T Cell line
SC049-1	Jurkat T / GFP Stable Cell (EF1a Promoter)
SC049-2	Jurkat T / GFP Stable Cell (Flt1 Promoter)



SC049-3	Jurkat T / GFP Stable Cell (CD43 Promoter)
SC049-4	Jurkat T / GFP Stable Cell (CD68 Promoter)
SC049-5	Jurkat T / GFP Stable Cell (Survivin Promoter)
SC050-G	MCF7 / GFP (Puromycin) Cell Line
SC050-L	MCF7 / Firefly Luciferase (Puro) Cell Line
SC051-G	ZR-75-1 / GFP (Puromycin) Cell Line
SC051-L	ZR-75-1 / Firefly Luciferase (Puro) Cell Line
SC053-L	NCI-H1299 / Luciferase (Puro) Stable Cells
SC054-L	CFPAC-1 / Luciferase (Puro) Stable Cells
SC055-G	MLLB2 / GFP (Neomycin) stable cell line
SC056-TetR	mouse CT26 / TetR Expression (Bsd) stable cells
SC057-Bsd	MDA-MB-231 / RFP (Bsd) Stable Cell Line
SC058	HEK293 / uGFP (unstable GFP) Stable Cells
SC059-Bsd	MDA-MB-231 / Luciferase (Bsd) Stable Cell Line
SC059-Puro	MDA-MB-231 / Luciferase (Puro) Stable Cell Line
SC060-G	Human B lymphocyte / GFP Stable Cells
SC060-LG	Human B lymphocyte (Luciferase / GFP) Stable Cells
SC060-LR	Human B lymphocyte (Luciferase / RFP) Stable Cells
SC060-R	Human B lymphocyte / RFP Stable Cells
SC061-G	Mouse CT26 / GFP Stable Cells
SC061-LG	Mouse CT26 (Luciferase & GFP) Stable Cells
SC061-LR	Mouse CT26 (Luciferase & RFP) Stable Cells
SC061-PDL1	Mouse CT26 / PDL1 Stable Cells
SC061-R	Mouse CT26 / RFP Stable Cells
SC062-G	Human AsPC1 / GFP Cell Line
SC062-LG	Human AsPC1 / Luciferase and GFP Cell Line



SC062-LR	Human AsPC1 / Luciferase and RFP Cell Line
SC062-Luc	Human AsPC1 / Luciferase Cell Line
SC062-R	Human AsPC1 / RFP Cell Line
SC063-LR	Mouse B lymphocyte (Luciferase & RFP) Stable Cell
SC063-Luc	Mouse B lymphocyte / Luciferase Cell Line
SC063-R	Mouse B lymphocyte / RFP Cell Line
SC064-G	Human HaCAT / GFP (Puro) Cell Line
SC064-TetR	Human HaCAT / TetR (Bsd) Cell Line
SC065-G	Mouse MB49 / GFP Stable Cells
SC065-LG	Mouse MB49 / Luciferase & GFP Stable Cells
SC065-LR	Mouse MB49 / Luciferase & RFP Stable Cells
SC065-R	Mouse MB49 / RFP Stable Cells
SC066-G	Human ES2 / GFP Stable Cells
SC066-LG	Human ES2 / Luciferase & GFP Stable Cells
SC066-LR	Human ES2 / Luciferase & RFP Stable Cells
SC066-R	Human ES2 / RFP Stable Cells
SC066-TetR	Human ES2 / TetR (Puro) Stable Cells
SC067-G	Human SW403 / GFP Stable Cells
SC067-Luc	Human SW403 / Luciferase Stable Cells
SC068-G	Human PANC-1 / GFP (Puro) Cell Line
SC068-LG	Human PANC-1 / Luciferase & GFP (Puro) Cell Line
SC068-Luc	Human PANC-1 / Luciferase (Puro) Cell Line
SC068-R	Human PANC-1 / RFP (Puro) Cell Line
SC069-G	Human 786-O / GFP Cell Line
SC069-LG	Human 786-O / Luciferase & GFP Cell Line
SC069-luc	Human 786-O / Luciferase Cell Line



SC070-G	Hela-nucGFP stable cells
SC070-R	Hela-nucRFP stable cells
SC072-G	Human T47D / GFP Stable Cells
SC072-LG	Human T47D / Luciferase & GFP Stable Cells
SC072-Luc	Human T47D / Luciferase Stable Cells
SC073-GB	Human MCF10A / GFP (Bsd) Stable Cells
SC073-GP	Human MCF10A / GFP (Puro) Stable Cells
SC073-Luc	Human MCF10A / Luciferase (Puro) Stable Cells
SC074-GB	Human SW1990 / GFP (Bsd) Stable Cells
SC074-GP	Human SW1990 / GFP (Puro) Stable Cells
SC074-LG	Human SW1990 / Luciferase & GFP (Puro) Stable Cells
SC074-Luc	Human SW1990 / Luciferase (Puro) Stable Cells
SC017	MDA-MB-231 / niRFP (Puro) Stable Cell Line
SC075	Human ACE2 Expression in Hela Cell Line
SC076	Human ACE2 Expression in HEK293T Cell Line
SC019	Firefly & Renilla Dual Luciferase Hela Cell Line
SC077	COVID-19 Spike (S) Protein / Hela Cell Line
SC071-Puro	Color Switch, CRE report cell line: Hela-loxP-GFP-RFP (Puro)
SC071-Neo	Color Switch, CRE report cell line: Hela-loxP-GFP-RFP (Neo)