



CRE Recombinase Expression Cell Lines

Catalog Number	Product	Amount
SC004-Bsd	CRE Expression / HEK293 Cell Line (Bsd)	1 vial of cells (2 x 10 ⁶ cells) in 80% DMEM, 10% FBS, 10% DMSO
SC004-GP	CRE Expression / HEK293 Cell Line (GFP, Bsd))	
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)	

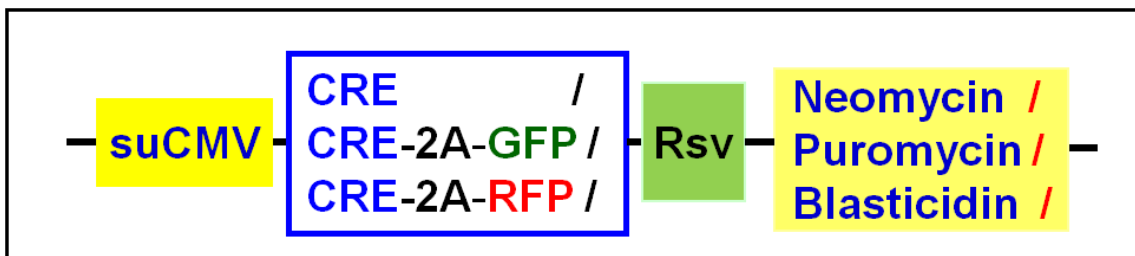
Storage: Liquid nitrogen

Product Description

The HEK293 Cell Line is a permanent 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.

CRE recombinase, from bacteriophage P1, catalyzes recombination between 34 base pair target sequences, named Lox sites. CRE-Lox recombination is a special type of site-specific recombination, and widely used to delete loxP-flanked chromosomal DNA sequences at high efficiency *in vivo*.

CRE stable cell is transformed from the 293 cell line and stably expresses a **nuclear localized CRE recombinase** (with an nuclear localization signal, NLS, at N-term of CRE). It is established by transduction of CRE expression lentivirus. CRE is constitutively expressed in high-level under [suCMV promoter](#). When included, a fluorescent protein (**GFP** or **RFP**) was co-expressed under the same promoter, as separated protein (not as fusion). The cell also contains an antibiotic selection marker under RSV promoter. Please see the **expression cassette** below for the expression structure.





GenTarget provides different CRE expression stable cell lines with different fluorescent and antibiotic markers. The fluorescent marker provides a convenient method to monitor the CRE expression.

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. 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 10⁶ cells/ml using 90% complete medium with 10% DMSO.

Complete medium

DMEM (high glucose)
2mM L-glutamine
10% Fetal Bovine Serum (FBS)
0.1 mM MEM Non-Essential Amino Acids (NEAA)
1% Pen-strep / Antibiotic-antimycoplasma

- Optional to add: final **0.5 ug/ml** of Puromycin or **10 ug/ml** of Blasticidin depend upon cell line product. (Note: do not add antibiotic at 1st time thaw culture)

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

- This product is warranted to perform as described when used in accordance with this manual. GenTarget's sole remedy for breach of warranty should be, at the option of GenTarget, to repair or replace the product if this product does not meet the stated quality standard.



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- 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.
- Gentarget **do not** provide the protected reporter's sequences information for all our cell line products.

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

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 (RFP) Expression stable cell line
SC004-Bsd	CRE stable cells with Blasticidin marker
SC004-GP	CRE stable cells with GFP-Puromycin dual marker
SC004-Neo	CRE stable cells with Neomycin marker
SC004-Puro	CRE stable cells with Puromycin marker
SC004-RB	CRE stable cells with RFP-blasticidin dual marker
SC004-RP	CRE stable cells with RFP-Puromycin dual marker
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 stable cells
SC009	GFP & RFP HEK293 stable cells
SC010	HEK293-CFP stable cells
SC011	HEK293-YFP stable cells
SC012	TAT stable cells
SC013	Glutamine Synthesis stable cells
SC014	Inducible h P53 stable cells
SC015	h OCT3/4 stable cells
SC016	h LIN28 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) and CRE co-expression stable cell line (GFP-Blasticidin)
SC021-Puro	Luciferase (firefly) and CRE co-expression stable cell line (puromycin)
SC021-RP	Luciferase (firefly) and CRE co-expression stable cell line (RFP-puromycin)
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 stable 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 stable cells
SC032-Bsd	Luciferase (firefly), Hela stable cells (Blasticidin)
SC032-GB	Luciferase-2A-GFP, Hela stable cells (Blasticidin)
SC032-GN	Luciferase-2A-GFP, Hela stable cells (Neomycin)
SC032-GP	Luciferase-2A-GFP, Hela stable cells (Puromycin)
SC032-Puro	Luciferase (firefly), Hela stable cells (Puromycin)
SC032-RB	Luciferase-2A-RFP, Hela stable cells (Blasticidin)
SC032-RN	Luciferase-2A-RFP, Hela stable cells (Neomycin)
SC032-RP	Luciferase-2A-RFP, Hela stable cells (Puromycin)
SC033	Inducible GFP HEK293 stable cell line
SC034-Bsd	Hela-GFP stable cells (Blasticidin)
SC034-Puro	Hela-GFP stable cells (Puromycin)
SC035-Puro	Hela-TetR (Puro) stable cells
SC036	Inducible GFP Hela stable cell line
SC037	Inducible RFP Hela stable cell line



SC038-GB	Hela-rtTA (GFP-Bsd) stable cells
SC038-GP	Hela-rtTA (GFP-Puro) stable cells
SC038-RB	Hela-rtTA (RFP-Bsd) 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 (Bad) Stable Cell Line
SC046	SH-SY5Y / RFP (Puromycin) stable cell line
SC047-GB	RKO / GFP Stable Cell Line (Blasticidin)
SC047-TetR	RKO / TetR (Bsd) Stable Cell Line
SC048	Jurkat T Cell /Firefly Luciferase (Puro) Stable 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) Stable Cell Line
SC050-L	MCF7 / Firefly Luciferase (Puro) Stable Cell Line



SC051-G	ZR-75-1 / GFP (Puromycin) Stable Cell Line
SC051-L	ZR-75-1 / Firefly Luciferase (Puro) Stable 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 (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 MOPC315 / Luciferase & RFP Cell Line
SC063-Luc	mouse MOPC315 / Luciferase Cell Line
SC063-R	Mouse MOPC315 / 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