

MDCK/Mouse FCGRT-P2A-mGFP&B2M Cell Line Development Service Data Sheet

MDCK/Mouse FCGRT-P2A-mGFP&B2M Cell Line

Catalog No.	Size
SCMDC-ATP196	2 × (1 vial contains ~5×10 ⁶ cells)

• Description

The MDCK/Mouse FCGRT-P2A-mGFP&B2M Cell Line was engineered to not only express full length mouse FCGRT (Gene ID: 14132) and mGFP by a viral P2A self-cleaving peptide, but also express full length mouse B2M (Gene ID: 12010). The expression of mGFP characterizing the mouse FCGRT was confirmed by flow cytometry. Surface expression of mouse B2M was confirmed by flow cytometry.

• Application

- Useful for cell-based mouse FCGRT-P2A-mGFP&B2M binding assay

• Cell Line Profile

Cell line	MDCK/Mouse FCGRT-P2A-mGFP&B2M Cell Line
Host Cell	MDCK
Property	Adherent
Complete Growth Medium	EMEM + 10% FBS
Selection Marker	Puromycin (2 µg/mL)+Hygromycin (20 µg/mL)
Incubation	37°C with 5% CO ₂
Doubling Time	22-24 hours
Transduction Technique	Lentivirus

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• *Materials Required for Cell Culture*

- Eagle's Minimum Essential Medium (ATCC, Cat. No. 30-2003)
- Fetal bovine serum (CellMax, Cat. No. SA211.02)
- Puromycin (InvivoGen, Cat. No. ant-pr-5b)
- Hygromycin B (Invitrogen, Cat. No. 10687010)
- 0.25% Trypsin-EDTA (1X), Phenol Red (Gibco, Cat. No. 25200-056)
- Penicillin-Streptomycin (Gibco, Cat. No. 15140-122)
- Phosphate Buffered Saline (1X) (HyClone, Cat. No. SH30256.01)
- Complete Growth Medium: EMEM + 10% FBS, 1%P/S
- Culture Medium: EMEM + 10% FBS, Puromycin (2 µg/mL), Hygromycin (20 µg/mL), 1%P/S
- Freeze Medium: 90% FBS, 10% (V/V) DMSO
- T-75 Culture flask (Corning, 430641)
- Cryogenic storage vials (SARSTEDT, 72.379.007)
- Thermostat water bath
- Centrifuge
- Luna cell counter (Logos Biosystems, LUNA- II)
- CO₂ Incubator (Thermo, 3111)
- Biological Safety Cabinet (Thermo, 1389)

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• *Recovery*

1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the cap out of the water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by spraying with 70% ethanol. All the operations from this point on should be carried out under strict aseptic conditions.
3. Transfer the vial contents to a centrifuge tube containing 4.0 mL complete growth medium and spin at approximately 1000 rpm for 5 minutes.
4. Resuspend cell pellet with 5 mL complete growth medium and transfer the cell suspension into T-75 flask containing 10-15 mL of pre-warmed complete growth medium.
5. Incubate at 37°C with 5% CO₂ incubator until the cells are ready to be split.

• *Subculture*

1. Remove and discard culture medium.
2. Wash the cells 2 times with sterile PBS.
3. Add 5 mL of 0.25% trypsin to cell culture flask. Place the flask at the room temperature for 2-5 minutes, discard the 0.25% trypsin.
4. Add 5 mL of 0.25% trypsin to cell culture flask. Place the flask at 37°C for 5-15 minutes, until 90% of the cells have detached.
5. Add 6.0 to 8.0 mL of culture medium and aspirate cells by gently pipetting.
6. Add appropriate aliquots of the cell suspension to new culture vessel.
7. Incubate at 37°C with 5% CO₂ incubator.

Subcultivation Ratio: A subcultivation ratio of 1:6 to 1:10 is recommended.

Medium Renewal: Every 2 to 3 days.

Note: After recovery for 1-2 generations with the complete growth medium not containing the selection marker, if the cell state is well, changing to the culture medium containing the selection marker.

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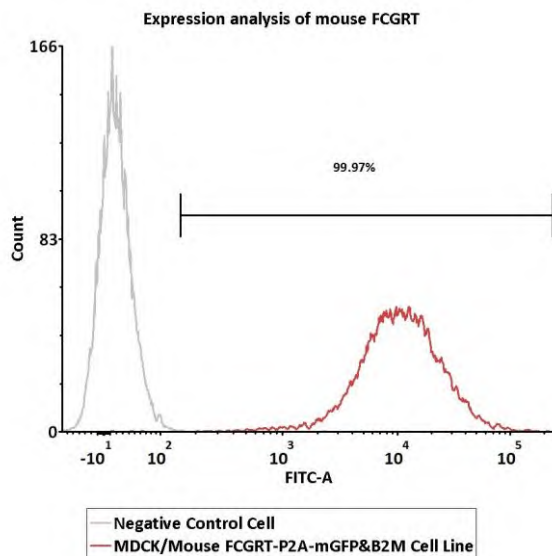
1. Remove and discard spent medium.
2. Detach cells from the cell culture flasks with 0.25% trypsin.
3. Centrifuge at 1000 rpm for 5 min at RT to pellet cells.
4. Resuspend the cell pellets with complete growth medium and count viable cells.
5. Centrifuge at 1000 rpm for 5 min at RT and resuspend cells in freezing medium to a concentration of 5×10^6 to 1×10^7 cells/mL.
6. Aliquot into cryogenic storage vials. Place vials in a programmable cooler or an insulated box placed in a -80°C freezer overnight, then transferring to liquid nitrogen storage.

• Storage

- **Product format:** Frozen
- **Storage conditions:** Liquid nitrogen immediately upon receipt

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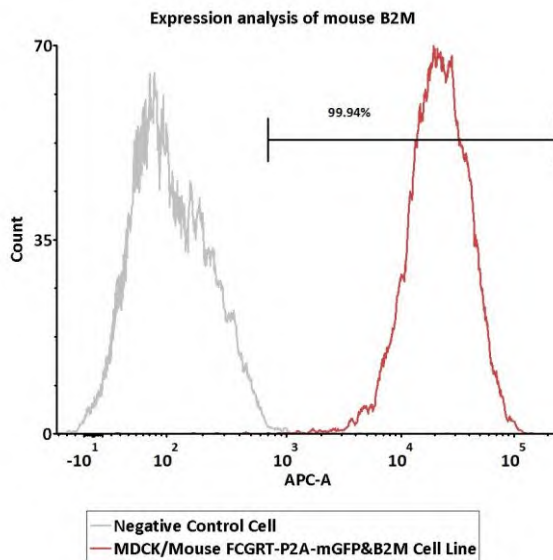
• *Receptor Assay*



Catalog No.	Stable Cell Line	MFI for FCGRT (FITC)
NA	Negative Control Cell	14.63
SCMDC-ATP196	MDCK/Mouse FCGRT-P2A-mGFP&B2M Stable Cell Line	10220.06

Fig1. Expression analysis of mouse FCGRT on MDCK/Mouse FCGRT-P2A-mGFP&B2M Stable Cell Line by FACS. The expression of mGFP characterizing the mouse FCGRT was detected by flow cytometry.

MDCK/Mouse FCGRT-P2A-mGFP&B2M Cell Line Development Service Data Sheet



Catalog No.	Stable Cell Line	MFI for B2M (APC)
NA	Negative Control Cell	96.78
SCMDC-ATP196	MDCK/Mouse FCGRT-P2A-mGFP&B2M Stable Cell Line	20986.23

Fig2. Expression analysis of mouse B2M on MDCK/Mouse FCGRT-P2A-mGFP&B2M Stable Cell Line by FACS. Cell surface staining was performed on MDCK/Mouse FCGRT-P2A-mGFP&B2M Stable Cell Line or negative control cell using APC-labeled anti-mouse β 2-microglobulin antibody.

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• *Related Products*

<u>Products</u>	<u>Cat.No.</u>
CHO/Human Mesothelin Stable Cell Line Development Service	SCCHO-ATP120
CHO/Human Glypican-3 (GPC3) Stable Line Development Service	SCCHO-ATP112
CHO/Human STEAP1 Stable Cell Line Development Service	SCCHO-ATP121
CHO/Human uPAR Stable Cell Line Development Service	SCCHO-ATP152
CHO/Human c-MET Stable Cell Line Development Service	SCCHO-ATP141
CHO/Mouse FCGRT-P2A-mGFP&B2M Cell Line Development Service	SCCHO-ATP193
HEK293/Human ROR1 Stable Cell Line	CHEK-ATP084
HEK293/Human Mesothelin Stable Cell Line	CHEK-ATP119
HEK293/Human Glypican-3 (GPC3) Stable Cell Line	CHEK-ATP092
HEK293/Human FOLR1 Stable Cell Line	CHEK-ATP091
HEK293/Human DLL3 Stable Cell Line	CHEK-ATP090
HEK293/Human TL1A Stable Cell Line	CHEK-ATP142
HEK293/Human NAPI-IIb Stable Cell Line	CHEK-ATP116
HEK293/Human Cadherin-6 Stable Cell Line	CHEK-ATP127
HEK293/Human ENPP3 Stable Cell Line	CHEK-ATP122
HEK293/Human B7-H4 Stable Cell Line	CHEK-ATP126
HEK293/Human Cadherin-17 Stable Cell Line	CHEK-ATP173