

# SG01 Cell Line

**Catalogue number:** 153460

**Sub-type:** Continuous

**Images:**

## Contributor

**Inventor:** Jason Powell ; Chris Ward

**Institute:** Newcastle University

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** SG01 Cell Line

**Alternate name:**

**Class:**

**Conjugate:**

**Description:** The subglottic airway is an important gatekeeper that functions to prevent lower lung infection and is a crucial area in terms of inflammation (subglottic stenosis) and malignancy.

**Purpose:**

**Parental cell:** Subglottic brushing specimen

**Organism:** Human

**Tissue:** Subglottis

**Model:** Immortalised Line

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:** Adherent

**Production details:** The SG01 Cell Line was derived from a single patients neoplasia-free human subglottic brushing specimen. The cells were immortalised using a SV40 Cell immortalization system, utilizing a recombinant lentiviral vector. SG01 were successfully lifted onto an air-liquid interface (ALI) culture system, using the appropriate growth medium. At ALI cells demonstrated cilia coverage and mucus production. Cells demonstrate tight epithelial junctions and relevant ion channels expression,

including ENaC,...

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:**

**Target alternate names:**

**Target background:**

**Molecular weight:**

**Ic50:**

## Applications

**Application:**

**Application notes:** How to plate the cells from frozen ampule: Prepare a flask coated with 10ug/cm<sup>2</sup> Collagen (Type 1) at the following volumes 2.5mls/25cm<sup>2</sup>; 7.5ml/75cm<sup>2</sup> and 17.25mls/175cm<sup>2</sup>. (Sigma 0.1% solution, 8919-20ML), diluted 1:10 in growth medium (BEGM). Add mixture at ratio of 0.1 ml per cm surface area. Incubate at 37°C for approximately 6 hours and 5% CO<sub>2</sub>, or overnight at 4C. Remove excess fluid prior to use and wash flask with either PBS or media. Seeding density at first seed and...

## Handling

**Format:** Frozen

**Concentration:**

**Passage number:**

**Growth medium:** SG01 cells were cultured on a collagen coated container in Bronchial Epithelial Cell Growth Medium (BEGM) (available from Clonetics Corporation, CC3171 (BEBM) plus additives CC4175 or BEGM Bullet Kit, CC3170). , supplemented with 100 g/mL streptomycin and 100 U/mL penicillin at 37°C and 5% CO<sub>2</sub>. Split sub-confluent cultures (70-80%) 1:3 to 1:6 using 0.05% trypsin/EDTA.

**Temperature:**

**Atmosphere:**

**Volume:**

**Storage medium:**

**Storage buffer:**

**Storage conditions:**

**Shipping conditions:**

Dry ice

## Related tools

**Related tools:**

## References

**References:** Momany et al. 2004. Microbiology. 150(Pt 10):3261-8. PMID: 15470106. ; The Aspergillus fumigatus cell wall is organized in domains that are remodelled during polarity establishment. ; Ste-Marie et al. 1990. Infect Immun. 58(7):2105-14. PMID: 2194959. ; Production and characterization of monoclonal antibodies to cell wall antigens of Aspergillus fumigatus.

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