

A549-ACE2plusC3 Cell Line

Catalog No. NR-59471

Product Description:

A549 cells were transfected using lentivirus. Angiotensin C Enzyme 2 and TMPRSS2 genes were added, resulting in A549-ACE2plus, a SARS-CoV-2 susceptible cell line expressing ACE2 and TMPRSS2. Following single-cell sorting, Subclone 3 was derived, resulting in A549-ACE2plusC3.

Lot: 70063489

Manufacturing Date: 15SEP2023

TEST	SPECIFICATIONS	RESULTS
Growth Properties	Adherent	Adherent
Morphology	Epithelial-like	Epithelial-like
Confirmation of ACE2 Expression by Fluorescent Antibody Assay¹	Fluorescence observed	Fluorescence observed
Confirmation of TMPRSS2 Expression by Fluorescent Antibody Assay²	Fluorescence observed	Fluorescence observed
Multiplex PCR Amplification of Cytochrome C Oxidase I (COI) Gene	Human origin No evidence of another species	Human origin No evidence of another species
Total Cell Count	> 1.0 × 10 ⁶ cells/vial	5.2 × 10 ⁶ cells/vial
Post-Freeze Viability	≥ 50%	94.3%
Sterility (21-day incubation) Harpo's HTYE broth, 37°C and 26°C, aerobic ³ Trypticase Soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Sheep blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C and 5% CO ₂	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth
Mycoplasma Contamination Hoechst DNA stain Agar and broth culture (14-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected None detected	None detected None detected None detected

¹Performed using Proteintech (66699-1-1g) at 1:300

²Performed using EMD Millipore (MABF2158) at 1:250

³Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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