

***Cercopithecus aethiops* Kidney Epithelial Cells Expressing Transmembrane Protease, Serine 2 and Human Angiotensin-Converting Enzyme 2 (Vero E6-TMPRSS2-T2A-ACE2)**

**Catalog No. NR-54970**

**Product Description:**

NR-54970 (Vero E6-TMPRSS2-T2A-ACE2 cells) contains a preparation of *Cercopithecus aethiops* kidney epithelial cells (Vero E6; ATCC® CRL-1586™) which were modified to express higher levels of transmembrane protease, serine 2 (TMPRSS2) and angiotensin-converting enzyme 2 (ACE2).

**Lot: 70050994**

**Manufacturing Date: 09MAR2022**

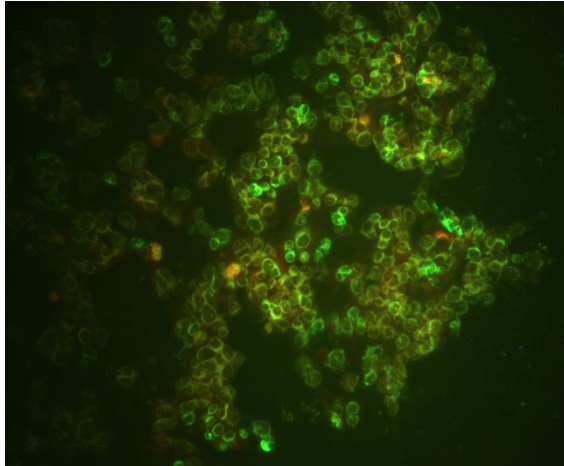
| TEST  | SPECIFICATIONS  | RESULTS   |
|---|---|---|
| <b>Growth Properties</b>  | Adherent  | Adherent  |
| <b>Morphology</b>   | Epithelial  | Epithelial  |
| <b>Confirmation of ACE2 Expression by Indirect Fluorescent Antibody Assay (Seed Material)<sup>1</sup></b>   | Fluorescence observed   | Fluorescence observed (Figure 1)  |
| <b>Confirmation of TMPRSS2 Expression by Indirect Fluorescent Antibody Assay (Seed Material)<sup>2</sup></b>  | Fluorescence observed   | Fluorescence observed (Figure 2)  |
| <b>Multiplex PCR Amplification of Cytochrome C Oxidase I (COI) Gene</b>   | African green monkey origin<br>No evidence of another species                           | African green monkey origin<br>No evidence of another species                           |
| <b>Total Cell Count</b>   | > 1.0 × 10 <sup>6</sup> cells per vial  | 6.1 × 10 <sup>6</sup> cells per vial  |
| <b>Post-Freeze Viability</b>  | ≥ 50%   | 86.9%   |
| <b>Sterility (21-day incubation)</b><br>Harpo's HTYE broth, 37°C and 26°C, aerobic <sup>3</sup><br>Trypticase Soy broth, 37°C and 26°C, aerobic<br>Sabouraud broth, 37°C and 26°C, aerobic<br>Sheep blood agar, 37°C, aerobic<br>Sheep blood agar, 37°C, anaerobic<br>Thioglycollate broth, 37°C, anaerobic<br>DMEM with 10% FBS, 37°C, aerobic | No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth | No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth<br>No growth |
| <b>Mycoplasma Contamination</b><br>Hoechst DNA stain<br>Agar and broth culture (14-day incubation at 37°C)<br>DNA detection by PCR of extracted Test Article nucleic acid   | None detected<br>None detected<br>None detected   | None detected<br>None detected<br>None detected   |

<sup>1</sup>Seed material tested using Anti-ACE2 mouse monoclonal antibody (Proteintech®, 66699-1-Ig)

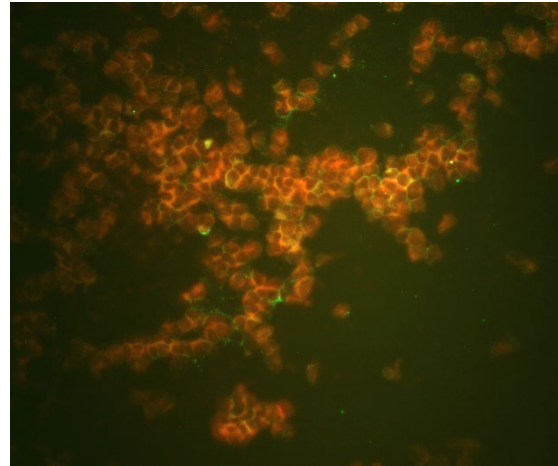
<sup>2</sup>Seed material tested using Anti-TMPRSS2 mouse monoclonal antibody (Millipore®, MABF2158-25ug)

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

**Figure 1: IFA for Confirmation of ACE2 Expression**  
(Seed material)



**Figure 2: IFA for Confirmation of TMPRSS2 Expression**  
(Seed material)



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