

**Human Coronavirus, OC43 in HRT-18G Cells**

**Catalog No. NR-56241**

**Product Description:**

Human coronavirus (HCoV), OC43 was isolated in 1967 from a respiratory sample from a human adult with a cold-like illness in the Common Cold Unit, Salisbury, England, United Kingdom and deposited with ATCC® as VR-759™, which was cleaned of mycoplasma contamination and adapted to cell culture and became VR-1558™. VR-1558 was used to produce BEI Resources NR-56241. NR-56241 lot 70048790 was produced by infecting human ileocecal colorectal adenocarcinoma cells (HRT-18G; ATCC CRL-11663™) and incubating in DMEM (ATCC 30-2002™) supplemented with 2% irradiated fetal bovine serum (Hyclone® SH30070-03) for 4 days at 33°C with 5% CO<sub>2</sub>.

**Passage History:**

X(?)HRT-18(7)/HCT-8(6)/HCT-8(1);HRT-18G(1) (Prior to deposit at ATCC/ATCC/BEI Resources); X = Unknown; HRT-18 = Human ileocecal colorectal adenocarcinoma cells; HCT-8 = Human ileocecal colorectal adenocarcinoma cells (ATCC CCL-244); HRT-18G (ATCC CRL-11663)

**Lot: 70048790**

**Manufacturing Date: 12OCT2021**

TEST	SPECIFICATIONS	RESULTS
<b>Identification by Infectivity in HRT-18G Cells</b>	Vacuolation, degeneration and detachment	Vacuolation, degeneration and detachment
<b>Sequencing of Species-Specific Region</b> (~ 1000 nucleotides)	≥ 98% identity with HCoV, OC43 (GenBank: AY585228.1)	100% identity with HCoV, OC43 (GenBank: AY585228.1)
<b>Titer by TCID<sub>50</sub> Assay in HRT-18G Cells by Cytopathic Effect<sup>1</sup></b> (8 days at 33°C and 5% CO <sub>2</sub> )	Report results	2.8 × 10 <sup>7</sup> TCID <sub>50</sub> per mL
<b>Sterility (21-day incubation)</b> Harpo's HTYE broth, 37°C and 26°C, aerobic <sup>2</sup> 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, aerobic	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
<b>Mycoplasma Contamination</b> 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

<sup>1</sup>The Tissue Culture Infectious Dose 50% (TCID<sub>50</sub>) endpoint is the 50% infectious endpoint in cell culture. The TCID<sub>50</sub> is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the culture vessels inoculated, just as a Lethal Dose 50% (LD<sub>50</sub>) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID<sub>50</sub> provides a measure of the titer (or infectivity) of a virus preparation.

<sup>2</sup>Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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05 APR 2022

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