



Certificate of Analysis for HRP-20251

Human Cell Line, SMC5 Knockout CEM-SS

Catalog No. HRP-20251

Product Description:

HRP-20251 is a CEM-SS cell (human CD4 T-cell) line with the SMC5 component knocked out of the Structural Maintenance of Chromosome (SMC) 5/6 complex. It is a suspension cell line. HRP-20251 lot 70057206 was produced by culture with RPMI-1640 medium (ATCC® 30-2001™) supplemented with 10% fetal bovine serum (FBS; ATCC® 30-2020™) and, after initial growth, maintained by adding 1 µg/mL puromycin (Gibco™). Cells were started in media without selection antibiotic (puromycin) for several days, then replaced with media with puromycin for the remainder of growth.¹

Lot: 70057206

Manufacturing Date: 12DEC2022

TEST	SPECIFICATIONS	RESULTS
Growth Properties	Suspension	Suspension
Morphology	Round	Round
Multiplex PCR Amplification of Cytochrome C Oxidase I (COI) Gene	<i>Homo sapiens</i> origin	<i>Homo sapiens</i> origin
Total Cell Count	> 1.0 × 10 ⁶ cells/vial	4.8 × 10 ⁶ cells/vial
Functional Activity Western blot analysis with SMC5 antibody	No band present at ~ 125 kDa	No band present at ~ 125 kDa
Post-Freeze Viability	≥ 50%	61%
Sterility (21-day incubation) Harpo's HTYE broth, 37°C and 26°C, aerobic ² 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
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

¹Irwan, I. D., H. P. Bogerd and B. R. Cullen. "Epigenetic Silencing by the SMC5/6 Complex Mediates HIV-1 Latency." *Nat. Microbiol.* 12 (2022): 2101-2113. PubMed: 36376394.

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

/Ken Crawford/

Ken Crawford

Lead Technical Writer, ATCC Federal Solutions

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NIH HIV Reagent Program

www.hivreagentprogram.org

E-mail: contact@HIVReagentProgram.org

Tel: 888-487-0727 | Fax: 703-365-2898

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