Note: LifeNet Health acquired the assets of Samsara Sciences in November 2019; therefore, some product documentation my contain Samsara branding. For any questions, please contact LifeNet Health LifeSciences at cells_tissues@lifenethealth.org



CERTIFICATE OF ANALYSIS

Product Name: Human Liver-derived Endothelial Cells Catalog Number: HLECp0

Lot Number: HL170062ECp0

STORAGE CONDITION

Short-Term (1-3 days): -80°C

Long-Term (>3 days): Liquid nitrogen vapor phase

| QUALITY CONTROL RESULTS | | |
|--|---|--|
| Appearance: | Yellowish frozen liquid | |
| Passage Number: | 0 | |
| Post-Thaw Yield: | 1.2 x 10 ⁶ viable cells / vial | |
| Post-Thaw Viability (AO/PI stain): | 85% | |
| Population Doubling: | 1.7 Days | |
| Cell Size Average: | 17.1 microns | |
| Mycoplasma (Roche MycoTOOL [®]): | Undetected | |
| Culture Morphology: | Characteristic morphology (see Figure 1) | |
| Biomarker Expression by Flow Cytometry: | Characteristic expression (see Figure 2) | |

| SEROLOGY | | |
|----------------------------|--------------|--|
| Anti-CMV: | Positive | |
| EBV: | Positive | |
| Anti-HCV: | Non-reactive | |
| Anti-HBcAb: | Non-reactive | |
| HBsAg: | Non-reactive | |
| HBsAb (optional): | Not tested | |
| Anti-HIV I/II: | Non-reactive | |
| Anti-HTLV I/II (optional): | Not tested | |
| Syphilis: | Non-reactive | |

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Ken Dorko, Associate Director Laboratory Operations

09-05-2019 Date

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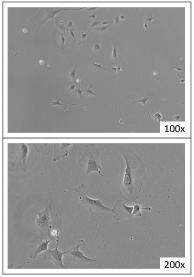
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FIGURE 1. Culture Morphology

Shown for thawed and cultured, passage 1 cells

< 50% Confluence



> 85% Confluence

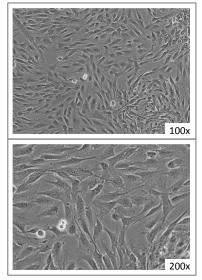
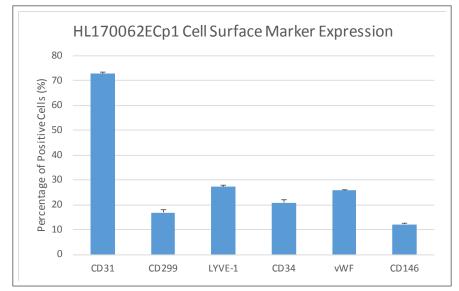


FIGURE 2. Flow Cytometry Profile

Shown for thawed and cultured, passage 2 cells



Results above determined by following Samsara Endothelial Cell care and handling protocols.

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