

# Certificate of Analysis

## Gibco® Episomal hiPSC Line, 1 Vial



**Combo Kit Part Number:** K18945 denotes cells + documentation

**Part Number:** A18944

**Lot Number:** 1625296

**Immediate Storage:** Liquid nitrogen or thaw for immediate use.

**Shipping Conditions:** dry ice overnight (or liquid N<sub>2</sub> followed by dry ice overnight)

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### **Description:**

The Gibco® Episomal hiPSC line is a zero-footprint, viral-integration-free human induced pluripotent stem cell (iPSC) line generated using cord blood-derived CD34+ progenitors with seven episomally expressed factors (Oct4, Sox2, Klf4, Myc, Nanog, Lin28, and SV40 T). The iPSC line was cultured on mouse feeder cells and subsequently adapted to feeder-free, serum-free culture conditions. Whole genome expression and epigenetic profiling analyses demonstrated that the Gibco® Episomal hiPSC line is molecularly indistinguishable from human embryonic stem cell lines. In directed differentiation and teratoma analyses, the hiPSCs retained their differentiation potential for the ectodermal, endodermal, and mesodermal lineages. In addition, viral-free vascular, hematopoietic, neural, and cardiac lineages can be derived with robust efficiencies (Burridge et al., 2011). Grown in Essential 8™ medium under feeder-free conditions, the Gibco® Episomal hiPSC line can be used as a positive control in reprogramming procedures for iPSC generation.

### **Quantity of Cells:**

~ 1,000,000 cells/vial

### **Passage Number:**

P30E8P1

### **Storage and Handling:**

After shipment either thaw for immediate use or store in liquid nitrogen.

**Cells stored for more than 1 day at -80°C quickly lose viability.**

### **Caution:**

Not intended for human or animal diagnostic or therapeutic uses. Users should treat all human and animal cells as potential pathogens. Wear protective clothing and eyewear. Practice appropriate disposal techniques for potentially pathogenic or biohazardous materials.

### **Biosafety:**

Level 2

## QUALITY ASSURANCE

### **Pluripotency Testing:**

Positive for pluripotency markers SSEA4 and NANOG by flow cytometry

### **Pathogen Testing:**

The cell line has been tested for the following viruses by PCR.

<b>HIV-1</b>	negative
<b>HIV-2</b>	negative
<b>HTLV type I</b>	negative
<b>HTLV type II</b>	negative
<b>HSV-1</b>	negative
<b>HSV-2</b>	negative
<b>CMV</b>	negative
<b>EBV</b>	negative
<b>HBV</b>	negative
<b>HCV</b>	negative

### **Sterility Testing:**

**Bacterial and Fungal:** Samples are tested by direct inoculation and culture of blood agar plates, thioglycollate broth, DMEM with serum, and sabaoraud agar. **No contamination observed.**

**Mycoplasma:** Samples are tested for mycoplasma contamination using qPCR. **No mycoplasma detected.**

### **Karotype Testing:**

Cytogenetic analysis was performed on twenty G-banded metaphase cells from human cell line and all twenty cells demonstrated an apparently normal female karyotype.



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Ann Leonard

Date: 03/Mar/2015

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