



Cedars-Sinai RMI Induced Pluripotent Stem Cell (iPSC) Core  
Certificate of Analysis (COA)

|                 |  |
|-----------------|--|
| Cell Line Name  |  |
| CS Vial ID #(s) |  |
| Date Vialled    |  |
| Passage Number  |  |

The following testing specifications have been met for the specified cell line:

| Test Description   | Test Specification  | Result |
|--|---|--------|
| Mycoplasma   | No contamination detected   |        |
| Alkaline Phosphatase Staining  | Positive AP staining  |        |
| Karyotype by G-Banding   | Normal Karyotype  |        |
| <b>Pluripotency</b>  |   |        |
| <i>PrimeView Global Gene Expression Profile Assay (PluriTest)</i>                            | Pluripotency score ≥ 20 and novelty score ≤ 1.6   |        |
| <i>Immunocytochemistry (IF-IC)</i>   | OCT3/4, NANOG, SOX2, TRA-1-60, TRA-1-81, SSEA4  |        |
| <a href="#">TaqMan® hPSC Scorecard™ Assay</a>  | Confirm appropriate expression of self-renewal factors  |        |
| <b>Differentiation</b>   |   |        |
| <i>EB Formation</i>  | Successful Embryoid Body (EB) formation after 14 days   |        |
| <a href="#">TaqMan® hPSC Scorecard™ Assay</a>  | Tri-lineage differentiation potential<br><i>Endoderm, Ectoderm and Mesoderm</i>                               |        |
| <b>Reprogramming Plasmid Integration</b>   |   |        |
| <i>Genomic DNA PCR</i>   | Confirm the presence or absence of exogenous reprogramming plasmids   |        |
| <b>Parent Cell Line Lineage Determination</b>  |   |        |
| <a href="#">TCRB + TCRG T-Cell Clonality Assay</a><br><i>(Blood derived cell lines only)</i> | Confirm presence or absence of clonal T-cell receptor beta chain and gamma chain gene rearrangements in iPSCs |        |
| <b>Cell Line Authentication</b>  |   |        |
| <a href="#">STR Analysis</a>   | Confirm identity matching score is above 80%  |        |

DHRUV SAREEN, Ph.D  
CORE DIRECTOR



**CONTACT INFORMATION:**

**Core Director:**

Dhruv Sareen, Ph.D.

**Institution:**

Cedars-Sinai RMI Induced Pluripotent Stem Cell Core

**Phone Number:**

(310) 423-7074

**Address:**

8700 Beverly Blvd.

AHSP 8500

**Email Address:**

iPSCCore@cshs.org

Los Angeles, CA 90048

USA

**PARENT LINE IDENTIFICATION AND INFORMATION:**

Parent Cell Line: \_\_\_\_\_

Age at Tissue Sampling: \_\_\_\_\_

Phenotypic Sex:

Male

Female

Clinical Diagnosis (if known): \_\_\_\_\_

Specific Mutations (if known): \_\_\_\_\_

Additional Information:

**REPROGRAMMING INFORMATION:**

iPSC Line Name: \_\_\_\_\_

Vial ID(s): \_\_\_\_\_

Starting Cell Type:

PBMC

Fibroblast

Other: \_\_\_\_\_

Reprogramming Method:

Episomal

Sendai Virus

Other: \_\_\_\_\_

Reprogramming Factors:

Oct3/4

Sox2

KLF4

L-Myc

shp53

Lin28

Other: \_\_\_\_\_

**CULTURING INFORMATION:**

***MEDIUM:***

Growth Medium: \_\_\_\_\_

Company: \_\_\_\_\_

Catalog #: \_\_\_\_\_



**SUBSTRATE:**

Substrate Specification: \_\_\_\_\_

Company: \_\_\_\_\_

Catalog #: \_\_\_\_\_

Coating Concentration: \_\_\_\_\_

**PASSAGING METHOD:**

|                             |                        |                |        |
|-----------------------------|------------------------|----------------|--------|
| Method:                     | STEMPRO EZPassage Tool | Versene (EDTA) | ReLeSR |
| Passaging Frequency:        | 7 days                 | 7 days         | 7 days |
| Average Split Ratio:        |                        |                |        |
| Cell Line Preferred Method: |                        |                |        |

Rate of Differentiation:    \_\_ High (≥50%)            \_\_ Moderate (30-40%)            \_\_ Low (≤20%)

Freezing Media: \_\_\_\_\_

Recovery Media: \_\_\_\_\_

**CHARACTERIZATION OF UNDIFFERENTIATED PLURIPOTENT CELL LINE:**

**G-BAND KARYOTYPE:**

Performed By: \_\_\_\_\_

Passage Number: \_\_\_\_\_

Karyotyping Analysis & Results: \_\_\_\_\_

Interpretation: \_\_\_\_\_

Comments:

**PLURITEST:**

Final Result:            \_\_ Pass            \_\_ Fail            \_\_ Further Evaluate            \_\_ TBD            \_\_ N/A

Pluripotency Score: \_\_\_\_\_

Novelty Score: \_\_\_\_\_



**IMMUNOCYTOCHEMISTRY:**

Pluripotency Marker:

|    |        |          |          |       |      |      |
|----|--------|----------|----------|-------|------|------|
| AP | SSEA-4 | Tra-1-60 | Tra-1-81 | Nanog | Oct4 | Sox2 |
|    |        |          |          |       |      |      |

**PLASMID INTEGRATION ANALYSIS:**

Absence of plasmid integration confirmed by gDNA PCR:

Result:

Passage #: \_\_\_\_\_

|               |               |     |
|---------------|---------------|-----|
| EBNA Negative | EBNA Positive | TBD |
|               |               |     |

**CHARACTERIZATION OF DIFFERENTIATION POTENTIAL:**

This cell line has been assessed for differentiation potential by:

\_\_ 14 Day Embryoid Body Formation      \_\_ TaqMan® hPSC Scorecard™ Assay      \_\_ PCR

***hPSC SCORECARD DATA ANALYSIS:***

iPSC (Day 0):

Score:

EBs (Day 14):

Score:

Comments:

| Self-Renewal | Endoderm | Ectoderm | Mesoderm |
|--------------|----------|----------|----------|
|              |          |          |          |
|              |          |          |          |

**PARENT CELL LINE LINEAGE DETERMINATION:**

(Blood derived cell lines only)

T-Cell Clonality Assay:

Final Result:

| TCR-αβ      |             | TCR-γδ      |             |
|-------------|-------------|-------------|-------------|
| __ Positive | __ Negative | __ Positive | __ Negative |

\_\_ T-Cell Derived      \_\_ Non T-Cell Derived      \_\_ TBD      \_\_ N/A



iPSC Line: \_\_\_\_\_

**CELL LINE AUTHENTICATION:**

Parent Cell Line:

| AMEL | CSF1PO | D13S317 | D16S539 | D5S818 | D7S820 | TH01 | TPOX | vWA |
|------|--------|---------|---------|--------|--------|------|------|-----|
|      |        |         |         |        |        |      |      |     |

iPSC Line:

| AMEL | CSF1PO | D13S317 | D16S539 | D5S818 | D7S820 | TH01 | TPOX | vWA |
|------|--------|---------|---------|--------|--------|------|------|-----|
|      |        |         |         |        |        |      |      |     |

% Identity Match: \_\_\_\_\_

IDEXX IBR #(s): \_\_\_\_\_

**ADDITIONAL INFORMATION:**