

Certificate of Analysis

Thaw and Culture Details

| Cell Line Name | STAN226i-516C3 | | | |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--|--|
| WiCell Lot Number | DB35595 | | | |
| Provider/Client | Stanford University – Laboratory of Dr. | Thomas Quetermous | | |
| Banked By | Icahn School of Medicine at Mount Sin | ai Stem Cell Core | | |
| Thaw and Culture Recommendations | WiCell recommends thawing 1 vial into 2 wells of a 6 well plate using mTeSR [™] 1 and Matrigel [®] . WiCell recommends thawing using ROCK Inhibitor for best results. | | | |
| Protocol | WiCell Feeder Independent Pluripotent Stem Cell Protocol | | | |
| Culture Platform Prior to Freeze | Medium: mTeSR [™] 1 | Matrix: Matrigel® | | |
| Passage Number | p11 Cells were cultured for 11 passages prior to freeze and post colony selection. Plated cells at thaw should be labeled passage 12. | | | |
| Date Vialed | 06-December-2015 | | | |
| Vial Label | ISMMS 516i C3 P11 MM 120615 | | | |
| Biosafety and Use Information | Appropriate biosafety precautions should be followed when working with these cells. The end user is responsible for ensuring that the cells are handled and stored in an appropriate manner. WiCell is not responsible for damages or injuries that may result from the use of these cells. Cells distributed by WiCell are intended for research purposes only and are not intended for use in humans. | | | |



Certificate of Analysis

Results

| Test Description | Test Provider | Test Method Test Specification | | Result | |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------|------------|--|
| WiCell G-T-L Banding performed on 20 metaphase cells Expected | | Expected karyotype | See Report | | |
| Karyotype | Results: 46,XX Nonclonal findings: 47,XX,+4 Interpretation: This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution. There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism. | | | | |
| Post-Thaw Viable Cell Recovery | WiCell | Thaw using specified Thaw & Culture Recommendations Recoverable attachment after pass | | Pass | |
| Identity by STR | WiCell | PowerPlex 16 HS System by Promega [™] Defines STR profile of deposited cell lin | | See Report | |
| Mycoplasma | WiCell | PCR Amplification of mycoplasma specific detected with negative result | | Pass | |
| Sterility | Steris | Native Product Direct Transfer using FTM and TSB (ST/07) Negative for growth following 14 d | | Pass | |

Testing Reported by Provider

The Provider stated that some or all of the additional analyses listed below may have been performed for this cell line. For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

- RNA-Seq
- Whole Genome Sequencing
- Infinium[®] Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

| Approval Date | WiCell Quality Assurance Approval | |
|---------------|---------------------------------------------------------------------|--|
| 30-April-2025 | 4/30/2025 X HEB HBB Wilf-off Quality Assurance Signed by: HBruner | |



Chromosome Analysis Report: 106846

Date Reported: April 17, 2025

Cell Line: STAN226i-516C3-DB35595

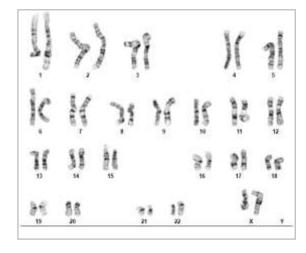
Submitted Passage #: 13

Date of Sample: 4/4/2025

Specimen: Human IPSC

Results: 46,XX

Nonclonal findings: 47,XX,+4



Cell Line Sex: Female

Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell

Cell: 22 Slide: G02

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 375 - 425

Interpretation:

This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.

There is a nonclonal finding, listed above. Nonclonal findings may result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.

Completed by: Dawn Davis, CG(ASCP)

Reviewed and Interpreted by: Justin Schleede, PhD, FACMG

| For internal use only | | | |
|-----------------------|----------|----------|---------------|
| Date: | Sent By: | Sent To: | QC Review By: |

Limitations: This assay allows for microscopic visualization of numerical and structural chromosome abnormalities. The size of structural abnormality that can be detected is >3-10Mb, dependent upon the G-band resolution obtained from this specimen. For the purposes of this report, band level is defined as the number of G-bands per haploid genome. It is documented here as "band level", i.e., the range of bands determined from the four karyograms in this assay. Detection of heterogeneity of clonal cell populations in this specimen (i.e.,mosaicism) is limited by the number of metaphase cells examined, documented here as "# of cells counted".

This assay was conducted solely for listed investigator/institution. The results of this assay are for research use only. Unless otherwise mutually agreed in writing, the services provided to you hereunder by WiCell Research Institute, Inc. ("WiCell") are governed solely by WiCell's Terms and Conditions of Service, found at www.wicell.org/privacyandterms. Any terms you may attach to a purchase order or other document that are inconsistent, add to, or conflict with WiCell's Terms and Conditions of Service are null and void and of no legal force or effect.



Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell Sample Receipt Date: 03Apr25, 04Apr25 STR Amplification Date: 15Apr25

| Sample Name | STAN226i-516C3- DB35595 p13 | STAN236i-551C1- DB35687 p16 | STAN227i-516C5- DB35603 p13 | | | |
|-----------------------|--------------------------------|--------------------------------|--------------------------------|--|--|--|
| WiCell CTR No.1 | 106846 | 106845 | 106844 | | | |
| FGA | | | | | | |
| TPOX | | | | | | |
| D8S1179 | | | | | | |
| vWA | | | | | | |
| Amelogenin | | | | | | |
| Penta_D | | Identifying | | | | |
| CSF1PO | | information has | | | | |
| D16S539 | been redacted to protect donor | | | | | |
| D7S820 | confidentiality. If | | | | | |
| D13S317 | more information is required, | | | | | |
| D5S818 | please contact | | | | | |
| Penta_E | | info@wicell.org | | | | |
| D18S51 | | | | | | |
| D21S11 | | | | | | |
| TH01 | | | | | | |
| D3S1358 | | | | | | |
| Allelic Polymorphisms | | | | | | |
| Matches ² | 106844 | 106715 | 106846 | | | |
| Comments | | | | | | |

¹ CTR No.: Characterization Test Request Number; also known as a laboratory accessioning number.

² The STR profile of the sample(s) listed are a 100% match for the given sample unless otherwise specified.



Short Tandem Repeat

Form SOP-89.01 Version 15.0

Requestor: WiCell Stem Cell Bank, WiCell Sample Receipt Date: 03Apr25, 04Apr25 STR Amplification Date: 15Apr25

<u>Assay Description:</u> Short Tandem Repeat (STR) analysis is performed using the PowerPlex® 16 HS System by Promega[™]. Results are reported as 13 CODIS STR markers, Amelogenin for sex determination and two low-stutter, highly discriminating pentanucleotide STR markers.

Results: The genotypic profiles comprise a range of 25-28 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> The concentration of DNA required to achieve an acceptable STR genotype (signal/ noise) was equivalent to that required for the standard procedure (~1 ng/amplification reaction) from human genomic DNA. These results suggest that the cells submitted correspond to the cell lines as named and were not contaminated with any other human cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity:</u> Sensitivity limits for detection of STR polymorphisms unique to either this or other human cell lines is ~2-4%.

| 4/18/2 | 2025 | 4/21/2025 | 4/22/2025 |
|-----------------------------------------------------------|---------------------------------------------------------------------------|-----------|-----------------------------------------------------------------|
| John Raff Tech #1 Characterization Signed by: Raff, John | X Anna Lisa Larson Tech #2 Characterization Signed by: Larson, Anna Lisa | | Dawn Graham QA Review Quality Assurance Signed by: Graham Dawn |

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Mycoplasma Assay Report

PCR-based assay performed by WiCell WiCell Stem Cell Bank, WiCell 11Apr25

Form SOP-83.01 Version 7.0

| Sample Name | Result | Interpretation |
|-------------------------------------|----------|-------------------------------------------------------------------|
| STAN226i-516C3-DB35595 p13 (106846) | Negative | Band was not seen at 270bp, indicating the absence of mycoplasma. |
| Positive (+) Control | Positive | |
| Negative (-) Control | Negative | |

| Assay Description |
|-------------------------------------------------------------------------------------------------|
| Sample is tested for presence of mycoplasma using EZ-PCR™ Mycoplasma Detection Kit (Sartorius). |

| 4/11/2025 | 4/11/2025 | 4/15/2025 |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------|
| X Michael Mussar Tech #1 Characterization Signed by: Mussar, Michael | X Steph Dos Santos Tech #2 Characterization Signed by: Dos Santos, Stephany | QA Review Quality Assurance Signed by: Graham, Dawn |

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A gel image is available upon request.

Native Product Sterility Report



SAMPLE #:

25030859

Accounting@wicell.org; WiCell Research Institute

DATE RECEIVED:

22-Mar-25

504 S Rosa Road, Rm 101

TEST INITIATED:

28-Mar-25

Madison, WI 53719 TEST COMPLETED:

11-Apr-25

SAMPLE NAME / DESCRIPTION:

CBiPS-E12C1-PCBC-WB68767 STAN227i-516C5-DB35603 STAN237i-551C2-DB35694 STAN226i-516C3-DB35595

STAN236i-551C1-DB35687 JHU129i-DB41332 JHU139i-DB36275 JHU216i-DB36861 JHU123i-DB41320 JHU231i-DB37030 JHU220i-DB41414 JHU067i-DB36212 JHU159i-DB41368 JHU124i-DB41323 JHU205i-DB36820 JHU089i-DB41243 JHU200i-DB36800 JHU141i-DB41341 JHU111i-DB36250

UNIQUE IDENTIFIER:

N/A

TEST RESULTS:

| | # Positives | |
|----------|-------------|-------------|
| # Tested | (Growth) | - Control |
| 20 | 0 | 2 Negatives |

JHU074i-DB41131

TEST SUMMARY:

| # Samples | Media Type | Volume (mL) | Incubation Temperature (° C) | Incubation Duration (Days) |
|-----------|------------|-------------|------------------------------------|----------------------------------|
| 20 | TSB | 40 | 20-25 | 14 |
| 20 | FTG | 40 | 30-35 | 14 |

REFERENCE:

Processed according to LAB-003: Sterility Test Procedure

PD #:

000053

TEST METHODOLOGY:

USP - Direct Transfer

STERIS 9303 West Broadway Ave Brooklyn Park, MN 55445

LAB-003 rev 40 Form 5 Effective: FEB 10, 2023

Native Product Sterility Report



| 1 | _ | B 4 | B 4 | | A I | TO |
|---|---|-----|-----|---|-----|-----|
| | | NЛ | NЛ | _ | N | TS: |
| | | | | | | |

Sample #25030859

AUTHORIZED BY _____

DATE MAPR 2025

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. This test report shall not be reproduced, except in full, without prior written approval. Liability is limited to the costs of the tests. Results applied to samples as received.