Certificate of Analysis

Thaw and Culture Details

Cell Line Name	**STAN225i-514C4**	
WiCell Lot Number	**DB44531**	
Provider/Client	Standford University – Laboratory of Dr. Thomas Quetermous	
Banked By	Icahn School of Medicine at Mount Sinai Stem Cell Core	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 5 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	p12 Cells were cultured for 12 passages prior to freeze and post colony selection. Plated cells at thaw should be labeled passage 13.	
Date Vialed	06-August-2015	
Vial Label	ISMMS i514 C4P12 AP 080615	
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
Karyotype	WiCell	G-T-L Banding performed on 20 metaphase cells	Expected karyotype	See Report
	Results: 46,XX ***Interpretation:*** This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.			
Post-Thaw Viable Cell Recovery	WiCell	Thaw using specified Thaw & Culture Recommendations	Recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega™	Defines STR profile of deposited cell line	See Report
Mycoplasma	WiCell	PCR	Amplification of mycoplasma specific DNA detected with negative result	Pass
Sterility	Steris	Native Product Direct Transfer using FTM and TSB (ST/07)	Negative for growth following 14 days of culture	Pass

Testing Reported by Provider

Test Description	Method	Result
Mycoplasma	Lonza MycoAlert kit	Negative

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})

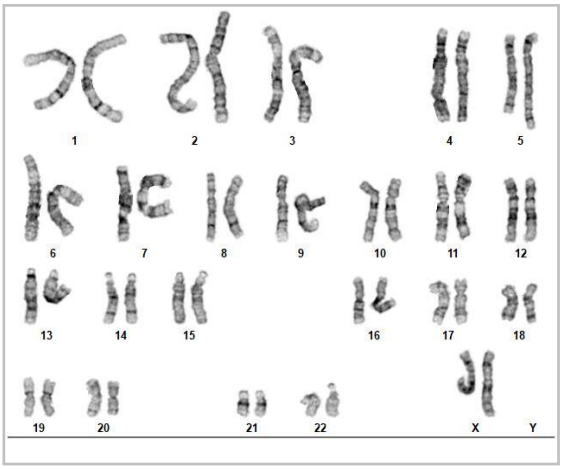
Certificate of Analysis

Approval Date	WiCell Quality Assurance Approval
21-August-2025	8/21/2025 X HEB HEB WiCell Quality Assurance Signed by: Bruner, Haley

Chromosome Analysis Report: 108516

Date Reported: July 30, 2025
Cell Line: STAN225i-514C4-DB44531
Submitted Passage #: 14
Date of Sample: 7/24/2025
Specimen: Human IPSC
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: LOT_RELEASE
Investigator: WiCell Stem Cell Bank, WiCell



Cell: 26
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 5
Band Resolution: 375 - 475

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

Completed by: Davena Lira, CG(ASCP)
Reviewed and Interpreted by: Xiangqiang Shao, 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".

Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell
Sample Receipt Date: 24Jul25
STR Amplification Date: 29Jul25

Sample Name	STAN225i-514C4-DB44531 p14	STAN337i-963C3-DB44506 p14	STAN336i-963C1-DB44503 p14	STAN261i-698C5-DB35565 p16
WiCell CTR No.[1]	108516	108515	108514	108513
FGA	[redacted]			
TPOX				
D8S1179				
vWA				
Amelogenin				
Penta_D				
CSF1PO				
D16S539				
D7S820				
D13S317				
D5S818				
Penta_E				
D18S51				
D21S11				
TH01				
D3S1358				
Allelic Polymorphisms				
Matches[2]		108514	108515	
Comments				Microvariant

Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org

[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

Requestor: WiCell Stem Cell Bank, WiCell
Sample Receipt Date: 24Jul25
STR Amplification Date: 29Jul25

Assay Description: 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 27-29 allelic polymorphisms across the 15 STR loci analyzed. Sample 108513 has a microvariant at the Penta E loci with a size of 4736 bp.

Interpretation: 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.

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

8/7/2025 X Steph Dos Santos Tech #1 Characterization Signed by: Dos Santos, Stephany	8/7/2025 X Julia Graham Tech #2 Characterization Signed by: Graham, Julia	8/8/2025 X Jennifer Leny QA Review Quality Assurance Signed by: Leny, Jennifer

Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell Stem Cell Bank, WiCell

29Jul25

Form SOP-83.01
Version 7.0

Sample Name	Result	Interpretation
STAN224i-514C3-DB44527 p14 (108525)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN225i-514C4-DB44531 p14 (108516)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN337i-963C3-DB44506 p14 (108515)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN336i-963C1-DB44503 p14 (108514)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN261i-698C5-DB35565 p16 (108513)	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).

8/1/2025 X Steph Dos Santos Tech #1 Characterization Signed by: Dos Santos, Stephany	8/4/2025 X Amber Kuhn Tech #2 Characterization Signed by: Kuhn, Amber	8/4/2025 X Hunter Hefti QA Review Quality Assurance Signed by: Hefti, Hunter

A gel image is available upon request.

Native Product Sterility Report

STERIS

WiCell Research Institute
504 S Rosa Road, Rm 101
Madison, WI 53719

SAMPLE #: 25070686
DATE RECEIVED: 24-Jul-25
TEST INITIATED: 25-Jul-25
TEST COMPLETED: 08-Aug-25

SAMPLE NAME / DESCRIPTION:
CVCL_C7VH-WB68975
CVCL_C7VM-WB68994
CVCL_C7VN-WB69011
CVCL_C7VP-WB68993
CVCL_C7VQ-WB68992
CVCL_C7VR-WB69005
CVCL_C7VT-WB68945
CVCL_C7VW-WB68972
CVCL_C7VX-WB68985
CVCL_C7VY-WB68973
CVCL_D3YC-WB69004
WIBR3-WB68995
WIBR3-WB69008
WIBR3-S1-WB68893
WIBR3-S2-WB68916
WIBR3-S3-WB68940
STAN224i-514C3-DB44527
STAN225i-514C4-DB44531
STAN261i-698C5-DB35565
STAN336i-963C1-DB44503
STAN337i-963C3-DB44506

UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
21	0	2 Negatives

TEST SUMMARY:

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

REFERENCE: Processed according to LAB-003: Sterility Test Procedure
PD #: 000053

Native Product Sterility Report

STERIS

TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: Sample #25070686

AUTHORIZED BY Lee Vang DATE 11Aug25

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.