Thaw and Culture Details

Cell Line Name	**STAN343i-998C1**
WiCell Lot Number	**DB35654**
Provider	Stanford 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. WiCell recommends thawing using ROCK Inhibitor for best results.
Culture Platform	Feeder Independent
	Medium: mTeSR1™
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR1™Protocol
Passage Number	p15 These cells were cultured for 15 passages after colony picking prior to freeze. Add +1 to the passage number to best represent the overall passage number of the cells at thaw.
Date Vialed	28-December-2015
Vial Label	ISMMS 998i C1 P15 PEC 122815
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.

Testing Performed by WiCell

Test Description	Test Provider	Test Method	Test Specification	Result
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype	See Report
	Results: 46,XY,dup(1)(q21q32)[19] Nonclonal findings: 47,XY,+Y,dup(1)(q21q32) ***Interpretation:*** This is an abnormal karyotype. Duplication of chromosome 1 from q21 to q32 is present in all 20 cells examined. Gain of chromosome 1, specifically 1q32 is recurrently acquired in pluripotent stem cell cultures. No other clonal abnormalities were detected at the stated band level of resolution. There is a nonclonal finding, an additional Y chromosome. 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	SOP-CH-305	Recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines STR profile	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-CH-044	Negative	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})

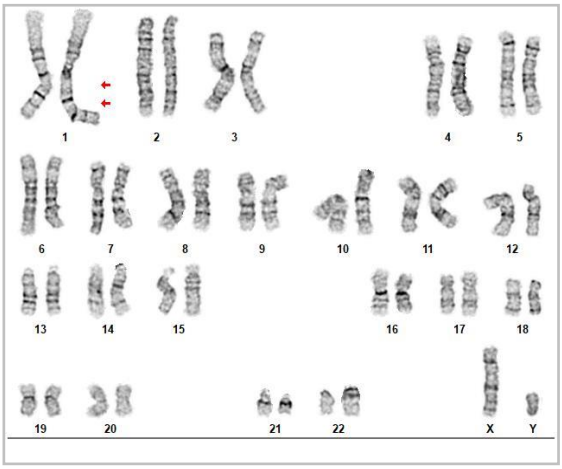
Approval Date	Quality Assurance Approval
08-November-2016	11/7/2019 X JKG JKG Quality Assurance Signed by: Gay, Jenna

Chromosome Analysis Report: 076401

Date Reported: Tuesday, May 14, 2019
Cell Line: STAN343i-998C1-DB35654 14566
Passage#: 17
Date of Sample: 5/2/2019
Specimen: Human IPS
Results: 46,XY,dup(1)(q21q32)[19]

Cell Line Sex: Male
Reason for Testing: lot release testing
Investigator: [redacted] WiCell

Nonclonal findings: 47,XY,+Y,dup(1)(q21q32)



Cell: 34
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 525

Interpretation:

This is an abnormal karyotype. Duplication of chromosome 1 from q21 to q32 is present in all 20 cells examined. Gain of chromosome 1, specifically 1q32 is recurrently acquired in pluripotent stem cell cultures. No other clonal abnormalities were detected at the stated band level of resolution.

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

Completed by: [redacted], CG(ASCP)
Reviewed and Interpreted by: [redacted], PhD, FACMG

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 Analysis

TRIPath
HISTOLOGY - IHC - MOLECULAR - IMAGING

Department of Pathology and Laboratory Medicine
TRIP Laboratory (Molecular)
https://research.pathology.wisc.edu/trip-home/
(608) 265-9168

WiCell
Your Lab Partner

characterization@wicell.org
(608) 316-4145

Sample Report:
14566-STR
Sample Name on Tube: 14566-STR
107.5 ng/µL, (A260/280=2.01)
Sample Type: Cells
Cell Count: ~2 million cells

Requestor:
WiCell Research Institute
Quality Assurance Department

Receive Date: 05/06/19
Report Sent: 05/09/19
Assay Date: 05/07/19
File Name: STR 190508 wmr
Report Date: 05/10/19

STR Locus	STR Genotype Repeat #	STR Genotype
FGA	16–18,18.2,19,19.2,20,20.2,21,21.2,22, 22.2, 23, 23.2, 24, 24.2, 25, 25.2, 26–30, 31.2, 43.2, 44.2,45.2, 46.2	Identifying information has been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support.
TPOX	6-13	
D8S1179	7-18	
vWA	10-22	
Amelogenin	X,Y	
Penta_D	2.2, 3.2, 5, 7-17	
CSF1PO	6-15	
D16S539	5, 8-15	
D7S820	6-14	
D13S317	7-15	
D5S818	7-16	
Penta_E	5-24	
D18S51	8-10, 10.2, 11-13, 13.2, 14-27	
D21S11	24,24.2,25,25.2,26-28,28.2,29,29.2, 30, 30.2,31, 31.2,32,32.2,33,33.2, 34,34.2,35,35.2,36-38	
TH01	4-9,9.3,10-11,13.3	
D3S1358	12-20	

Results: **Based on the 14566-STR cells submitted by WiCell QA dated and received on 05/06/19, this sample (Label on Tube: 14566-STR) defines the STR profile of the human cell line STAN343i-998C1 comprising 29 allelic polymorphisms across the 15 STR loci analyzed.**

Interpretation: **No STR polymorphisms other than those corresponding to the human STAN343i-998C1 cell line were detected and 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. This result suggests that the 14566-STR sample submitted corresponds to the STAN343i-998C1 cell line and was 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 ~2-5%.**

X *RMB* **Digitally Signed on 05/10/19**

[redacted] *BA*
TRIP Laboratory, Molecular

X *WMR* **Digitally Signed on 05/10/19**

[redacted] *PhD, Director / Co-Director*
UWHC Molecular Diagnostics Laboratory / UWSMPH TRIP Laboratory

Native Product Sterility Report

STERIS

SAMPLE #: 19071395

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

DATE RECEIVED: 18-Jul-19
TEST INITIATED: 24-Jul-19
TEST COMPLETED: 07-Aug-19

SAMPLE NAME / DESCRIPTION:

STAN037i-118-1	DB30906	14904
JHU058i	DB41092	14905
JHU172i	DB36377	14906
JHU170i	DB36371	14907
JHU225i	DB41417	14908
JHU143i	DB41347	14909
JHU104i	DB41282	14910
JHU080i	DB36222	14911
JHU097i	DB41267	14912
STAN343i-998C1	DB35654	14913

UNIQUE IDENTIFIER: NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	0	2 Negatives

TEST SUMMARY:

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

REFERENCE: Processed according to LAB-003: Sterility Test Procedure
PD #: 000053
TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: NA

REVIEWED BY _____ DATE 07 Aug 19

Mycoplasma Assay Report

PCR-based assay performed by WiCell

Lot Release Testing

30Apr19

FORM SOP-CH-044.03
Version B Edition 01

#	Sample Name	Result	Comments/Suggestions
1	STAN343i-998C1-DB35654 14566	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Katie Remondini, Cell Culture Specialist
Reviewed by: Sondra Minter, Cell Culture Specialist
Date:_____ Sent By:____ Sent To_____

A gel image is available upon request.