

Thaw and Culture Details

Cell Line Name	STAN100i-108C4						
WiCell Lot Number	DB44605						
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 3 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 p11 These cells were cultured for 11 passages after colony picking prior to freeze. Add +1 to th number to best represent the overall passage number of the cells at thaw.							
Date Vialed	15-October-2015						
Vial Label	ISMMS 108i C4P11 AP 101515						
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
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 profile	Pass
Sterility	Steris	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-QU-004	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})

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The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For clarity, the foregoing is governed solely by WiCell's Terms and Conditions of Service, which can be found at http://www.wicell.org/privacyandterms.



Approval Date	Quality Assurance Approval
27-October-2016	4/15/2019 XIG XIG Quality Assurance Signed by: Gay, Jenna

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Date Reported: Monday, December 10, 2018 Cell Line: STAN100i-108C4-DB44605-14130 Passage#: 12 Date of Sample: 11/30/2018 Specimen: Human IPS Results: 46,XY

38

88

Cell Line Sex: Male Reason for Testing: Lot Release Testing Investigator: , WiCell Cell: 48 Slide: G02 Slide Type: Karyotype Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 4 Band Resolution: 525 - 600

Interpretation:

10

Contraction of the second

1000

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

E

a line

Completed by: Reviewed and Interpreted by:	2	G(ASCP) hD, 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".

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.

TRIPath

HISTOLOGY - IHC - MOLECULAR - IMAGING

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

Sample Report:

14130-STR Sample Name on Tube: 14130-STR 69.0 ng/μL, (A260/280=1.79) Sample Type: Cells Cell Count: ~2 million cells

Short Tandem Repeat Analysis

WiCell Research Institute

Quality Assurance Department

Requestor:



characterization@wicell.org (608) 316-4145

Receive Date: 12/10/18 **Report Sent:** 12/17/18 **Assay Date:** 12/11/18 **File Name:** STR 181214 wmr **Report Date:** 12/16/18

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				
TPOX	6-13	information has				
D8S1179	7-18	been redacted to				
vWA	10-22	protect donor				
Amelogenin	X,Y	confidentiality. If more information				
Penta_D						
CSF1PO						
D16S539						
D7S820	D7S820 6-14					
D13S317	D13S317 7-15					
D5S818	D5S818 7-16					
Penta_E	5-24					
D18S51	D18851 8-10, 10.2, 11-13, 13.2, 14-27					
D21S11	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					

<u>Results:</u> Based on the 14130-STR cells submitted by WiCell QA dated and received on 12/10/18, this sample (Label on Tube: 14130-STR) defines matches the STR profile of the human stem cell line STAN100i-108C4 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human STAN100i-108C4 stem 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 14130-STR sample submitted corresponds to the STAN100i-108C4stem cell line and was not contaminated with any other human stem 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 stem cell lines is ~2-5%.

-[X RMB	Digitally Signed on	12/17/18	X WMR	Digitally Signed on	12/17/18
	TRIP La	, BA boratory, Molecular		UWHC Mole	, PhD, Director / Co-Directo ecular Diagnostics Laboratory / UWS	

Testing was accomplished by analysis of human genetic polymorphisms at STR loci. This methodology has not yet been approved by the FDA and is for investigational use only. Acknowledge TRIP in your publications, posters & presentations. For details, see: http://www.pathology.wisc.edu/research/trip/acknowledging 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 https://www.wicell.org/media.acux/ca76d97c-862a-43f3-b02a-ab2d1e619100. 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.

Native Product Sterility Report



	SAMPLE #:	18111110
WiCell	DATE RECEIVED:	15-Nov-18
504 S Rosa Rd , Rm 101	TEST INITIATED:	26-Nov-18
Madison, WI 53719	TEST COMPLETED:	10-Dec-18
SAMPLE NAME / DESCRIPTION:	LUEL8357i-3 WB66939 14103	
	LUEL8679i-4 WB66940 14104	
	STAN100i-108C4 DB44605 14105	
	STAN099i-108C2 DB44602 14106	
	STAN207i-459C2 DB35961 14107	
	STAN206i-459C1 DB35958 14108	
	STAN216i-496C1 DB35535 14109	
	LUEL7159i-7 WB66914 14110	
	EFNB2-tdTomato/EPHB4-EGFP DB66613 14116	
	JHU012i-2 DB36196 14117	
UNIQUE IDENTIFIER:	NA	
PRODUCT REGISTRATION:	Other: Human iPS cells	

PRODUCT REGISTRATION:

TEST RESULTS:	# Tested	# Positives (Growth)	- Control
	10	1	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: METHOD VALIDATION / PD #:

TEST METHODOLOGY:

Processed according to LAB-003: Sterility Test Procedure 000053

USP - Direct Transfer

COMMENTS:

Sample labeled LUEL7159i-7 WB66914 14110 is positive in TSB and FTG.

REVIEWED BY

DATE 201 118

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.



Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing November 08, 2018 FORM SOP-QU-004.01 Version G Edition 02 Reported by: AP Reviewed by: JB BD Monolight 180

		Read	ing A	Α	Read	ling B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	STAN100i-108C4-DB44605 14101	188	196	192	79	72	75.5	0.39	Negative	
2	Positive (+) Control	373	375	374	43003	43090	43047	115.10	Positive	
3	Negative (-) Control	687	701	694	97	83	90	0.13	Negative	

