

Thaw and Culture Details

Cell Line Name	STAN357i-298C2			
WiCell Lot Number	DB44224			
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 2 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 the passage number to best represent the overall passage number of the cells at thaw.			
Date Vialed	21-December-2015			
Vial Label	el ISMMS 298Bi C2 P11 MM 122115			
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
	WiCell	SOP-CH-003	Expected karyotype	See Report
Karyotype by G-banding	Results: 46,XX,dup(1)(q21q42.1)[5]/46,XX[15] Interpretation: This is an abnormal karyotype. An interstitial duplication of the long (q) arm of chromosome 1 is present in five of twenty cells examined. Gain of chromosome 1 is recurrently acquired in pluripotent stem cell cultures. No other clonal abnormalities were detected at the stated band level of resolution. copy and paste interpretation here; no bold or italics]			recurrently
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	Recoverable attachment after passage	Pass
Identity by STR	UW Translational	PowerPlex 16 HS		
	Research Initiatives in	System by	Defines STR profile	Pass
	Pathology Laboratory	Promega		
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

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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.



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	R/30/2019 XG XG Quality Assurance Signed by Gay, Jenna	

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Band Resolution: 400 - 575

Date Reported: Tuesday, July 23, 2019 Cell Line Sex: Female Cell Line: STAN357i-298C2-DB44224 14777 Reason for Testing: lot release testing Passage#: 13 Date of Sample: 7/16/2019 Investigator: WiCell Specimen: Human IPS *Results:* 46,XX,dup(1)(q21q42.1)[5]/46,XX[15] Cell: 3 Slide: G03 Slide Type: Karyotype Total Counted: 20 Total Analyzed: 8 Total Karyogrammed: 4

Interpretation:

38

This is an abnormal karyotype. An interstitial duplication of the long (q) arm of chromosome 1 is present in five of twenty cells examined. Gain of chromosome 1 is recurrently acquired in pluripotent stem cell cultures. No other clonal abnormalities were detected at the stated band level of resolution.

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

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-home/ (608) 265-9168

Sample Report:

14777-STR Sample Name on Tube: 14777-STR 63.0 ng/μL, (A260/280=2.08) Sample Type: Cells Cell Count: ~2 million cells

Short Tandem Repeat Analysis



characterization@wicell.org (608) 316-4145

Receive Date: 07/22/19 Report Sent: 07/26/19 Assay Date: 07/23/19 File Name: STR 190725 wmr Report Date: 07/26/19

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
TPOX	6-13	been redacted to
D8S1179	7-18	protect donor
vWA	10-22	confidentiality. If
Amelogenin	Х,Ү	more information
Penta_D	2.2, 3.2, 5, 7-17	is required,
CSF1PO	6-15	please, contact WiCell's Technical
D16S539	5, 8-15	Support.
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	

<u>Results:</u> Based on the 14777-STR cells submitted by WiCell QA dated and received on 07/23/19, this sample (Label on Tube: 14777-STR) defines the STR profile of the human cell line STAN357i-298C2 comprising 28 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human STAN357i-298C2 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 14777-STR sample submitted corresponds to the STAN357i-298C2 cell line and was 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 ~2-5%.

X RMB	Digitally Signed on 07/26/19	X WMR	Digitally Signed on 07/26/19
TRIP La	, BA boratory, Molecular	UWHC Mole	, PhD, Director / Co-Director ccular Diagnostics Laboratory / UWSMPH TRIP Laboratory

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: https://research.pathology.wisc.edu/acknowledging-trip/ 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.

Requestor: WiCell Research Institute Quality Assurance Department

Native Product Sterility Report



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

SAMPLE #:	19080059
DATE RECEIVED:	01-Aug-19
TEST INITIATED:	02-Aug-19
TEST COMPLETED:	16-Aug-19

SAMPLE NAME / DESCRIPTION: SCRP2310i DB42060 14929 SCRP2307i DB42057 14930 SCRP2407i DB42063 14931 SCRP2508i DB42079 14932 STAN357i-298C2 DB44224 14933 STAN359i-442C11 DB44237 14934 PENN025i-71-58 DB35127 14935 PENN041i-177-46 DB34934 14936 STAN378i-886C4 DB44665 14937 STAN275i-732C1 DB35789 14938 NA

UNIQUE IDENTIFIER:

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 accord	ling to LAB-003: St	erility Test Procedu	ure

PD #:

TEST METHODOLOGY:

USP - Direct Transfer

7

000053

COMMENTS: NA

REVIEWED BY

DATE 16 pugy

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.



Mycoplasma Assay Report

PCR-based assay performed by WiCell Lot Release Testing 16Jul19

#	Sample Name	Result	Comments/Suggestions
1	STAN357i-298C2-DB44224 14777	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Alex Paguirigan, Assistant Cell Culture Specialist

Reviewed by: Katie Remondini, Cell Culture Specialist

Date:_____ Sent By:____ Sent To__

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A gel image is available upon request.