

Thaw and Culture Details

Cell Line Name	UCSD217i-115-1			
WiCell Lot Number	WB55069			
Provider	University of California, San Diego – Dr. Kelly Frazer			
Banked By	WiCell			
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate.			
Culture Platform	Feeder Independent			
	Medium: mTeSR™1			
	Matrix: Matrigel®			
Protocol	tocol WiCell Feeder Independent mTeSR [™] 1 Protocol			
Passage Number	p21 These cells were cultured for 20 passages prior to freeze and post reprogramming. WiCell adds +1 to the passage number to best represent the overall passage number of the cells at thaw.			
Date Vialed 14-December-2016				
Vial Label	UCSD217i-115-1 p21 WB55069			
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	 ≥ 15 Undifferentiated Colonies, ≤ 30% Differentiation and 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-CH-044	Negative	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.

- Illumina® HumanCoreExome BeadChip Array
- RNA-Seq
- Flow Cytometry (SSEA-4, Tra 1-81)
- Infinium[®] Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})

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Approval Date	Quality Assurance Approval		
04-January-2017	HEB Quality Assurance		

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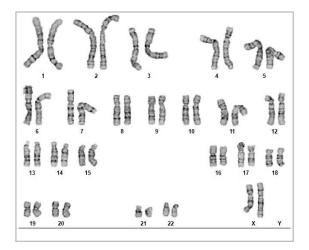
The material provided under this certificate has been subjected to the tests specified and the results and data described herein are accurate based on WiCell's reasonable knowledge and belief. Appropriate Biosafety Level practices and universal precautions should always be used with this material. For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



Date Reported: Tuesday, May 28, 2019 Cell Line: UCSD217i-115-1-WB55069 14722 Passage#: 21 Date of Sample: 5/14/2019 Specimen: Human IPS Results: 46,XX Cell Line Sex: Female Reason for Testing: Lot Release Testing

Investigator:

, WiCell



Cell: 2
Slide: G03
Slide Type: Karyotype
Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 475 - 550

Interpretation:

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

 Completed by:
 _______, CG(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 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:

14722-STR Sample Name on Tube: 14722-STR 36.9 ng/μL, (A260/280=1.95) 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: 05/20/19 Report Sent: 05/24/19 Assay Date: 05/21/19 File Name: STR 190522 wmr Report Date: 05/23/19

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	
TPOX	6-13	Identifying
D8S1179	7-18	information has been redacted to
vWA	10-22	protect donor
Amelogenin	X,Y	confidentiality. If
Penta_D	2.2, 3.2, 5, 7-17	more information
CSF1PO	6-15	is required,
D16S539	5, 8-15	please, contact
D7S820	6-14	WiCell's Technical
D13S317	7-15	Support.
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 14722-STR cells submitted by WiCell QA dated and received on 05/20/19, this sample (Label on Tube: 14722-STR) defines the STR profile of the human cell line UCSD217i-115-1 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human UCSD217i-115-1 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 14722-STR sample submitted corresponds to the UCSD217i-115-1 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 05/24/19	X WMR	Digitally Signed on 05/24/19
, BA TRIP Laboratory, Molecular	UWHC Mole	, PhD, Director / Co-Director ecular 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.

Native Product Sterility Report



				SAMPLE #:	18020291
WiCell		DATE RECEIVED: 06-Feb-			
504 S. Rosa Rd., Rm 101	L			TEST INITIATED:	07-Feb-18
Madison, WI 53719			TE	ST COMPLETED:	21-Feb-18
SAMPLE NAME / DES	:	CREM015i-SS16-1 WB66723 13311, CREM016i-SS18-1 WB66712 13312, CREM019i-SS25-1 WB66728 13313, CREM021i-SS29-1 WB66729 13314, H9- SOX2-GFP WB66727 13315, WC005i-FX11-7 WB20338 13316, WC009i-FX08-01 WB17924 13317, PENN015i-668-5 DB36410 13318, PENN029i-752-3 DB36392 13319, PENN009i-57-52 DB35131 13320, PENN034i-322-1 DB34729 13321, PENN077i-521-1 DB36597 13322, PENN125i-233-4 DB35073 13323, PENN136i- 262-1 DB35081 13324, UCSD048i-52-1 WB66722 13325, UCSD208i-111-1 WB66730 13326, UCSD133i-79-1 WB61228 13327, UCSD152i-11-3 WB61663 13328, UCSD168i-22-1 WB61577 13329, UCSD170i-22-3 WB60774 13330, UCSD175i-18-3 WB60837 13331, UCSD066i-67-1 WB60392 13332, UCSD099i- 35-2 WB65030 13334, UCSD117i-72-1 WB60039 13335, UCSD19i-38-2 WB60256 13336, UCSD125i-7-2 WB59219 13337, UCSD128i-7-5 WB60297 13338, UCSD151i-11-2 WB59218 13339, UCSD158i-12-4 WB60020 13340, UCSD088i-6-5 WB53942 13341, UCSD147i-10-2 WB54174 13342, UCSD167i-99- 1 WB54407 13343, UCSD198i-23-1 WB54163 13344, UCSD098i-35-1 WB55340 13345, UCSD100i-36-1 WB55460 13346, UCSD129i-75-1 WB54795 13347, UCSD136i-82-1 WB54902 13348, UCSD139i-85-1 WB55345 13349, UCSD173i- 18-1 WB54899 13350, UCSD187i-104-1 WB55339 13351, UCSD206i-31-1 WB54794 13352, UCSD217i-115-1 WB55069 13353, UCSD218i-116-1 WB55459 13354, UCSD094i-25-1 WB55177 13355, UCSD095i-25-2 WB57580 13356, UCSD097i-34-2 WB57100 13357, UCSD113i-68-1 WB57056 13358, UCSD115i- 70-1 WB55081 13359, UCSD184i-8-1 WB55338 13360, UCSD188i-105-1 WB55082 13361 NA			
PRODUCT REGISTR	ATION:	Other: Human iPS o	cells		
TEST RESULTS:	# Tested	# Positives (Growth)	- Control		
TEOTOURNARDY	50	0	3 Negative		
TEST SUMMARY:	# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
	50	TSB	40	20-25	14
	50	FTG	40	30-35	14
REFERENCE:		Processed according to LAB-003: Sterility Test Procedure			
METHOD VALIDATION / PD #:		000053			
TEST METHODOLOGY:		USP - Direct Transfer			

Native Product Sterility Report



COMMENTS: Sample # 18020291

REVIEWED BY 50

DATE 22 FEBIS

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 Assay Report

PCR-based assay performed by WiCell Lot Release Testing 14May19

#	Sample Name	Result	Comments/Suggestions
1	UCSD217i-115-1-WB55069 14722	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Brenna Anderson, Research Specialist- Cytogenetics Reviewed by: Sondra Minter, Cell Culture Specialist

Date:_____ Sent By:____ Sent To__

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A gel image is available upon request.