

Thaw and Culture Details

Cell Line Name	PACS1001i-GM27160
WiCell Lot Number	DB67267
Provider	PACS1 Foundation
Banked By	Coriell Institute for Medical Research
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 1 well of a 6 well plate. WiCell recommends thawing using ROCK Inhibitor for best results.
Culture Platform	Feeder Dependent
	Medium: Stem Cell Culture Medium
	Matrix: MEF
Protocol	WiCell Feeder Dependent Protocol
Passage Number	p16 These cells were cultured for 15 passages prior to freeze and post colony picking. The Provider adds +1 to the passage number at freeze to best represent what the overall passage number of the cells at thaw. Plated cells at thaw should be labeled passage 16.
Date Vialed	02-May-2019
Vial Label	S033751*B P16 DB 5/2/2019
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

Test Description	Result	Report
Sterility by growth on agar and broth	Negative	Report not available
Mycoplasma by qRT-PCR	Negative	Report not available
Identity Match by Short Tandem Repeat	Match parental cell line	Report not available
Cytogenomics by G-banding, Affymetrix Human SNP Array 6.0	46, XX[25].arr[hg19] 3p14.2p14.1(63,338,522- 64,532,276)x1, 22q11.23q12.1(25,393,867- 26,090,933)x3]	Report available

Approval Date	Quality Assurance Approval
16-September-2019	11/27/2019 X JKG JKG Quality Assurance Signed by Gay, Jenna



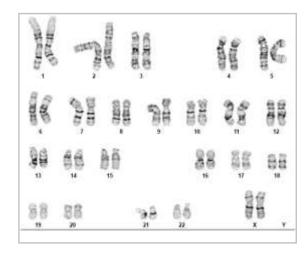
Chromosome Analysis Report: 077822

Date Repo	rted: Monday, August 12, 2019	Cell Line Sex:	Female
Cell Line:	PACS1001i-GM27160-DB67267 14927	Reason for Testing	g: lot release testing

Passage#: 17

Date of Sample: 8/7/2019 Specimen: Human IPSC

Results: 46,XX



Cell: 49

Investigator:

Slide: G02

Slide Type: Karyotype

, WiCell

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 475 - 525

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 are null and void and of no legal force or effect.



TRIP Laboratory (Molecular)

Short Tandem Repeat HISTOLOGY - IHC - MOLECULAR - IMAGING

Analysis



characterization@wicell.org

(608) 316-4145

Sample Report:

(608) 265-9168

14927-STR Sample Name on Tube: 14927-STR

Department of Pathology and Laboratory Medicine

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

 $14.8 \text{ ng/}\mu\text{L}$, (A260/280=53.69)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Quality Assurance Department **Receive Date:** 08/12/19 **Report Sent:** 08/21/19 **Assav Date:** 08/19/19

File Name: STR 190820 wmr

Report Date: 08/21/19

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	X,Y	more information
Penta_D	2.2, 3.2, 5, 7-17	is required, please, contact
CSF1PO	6-15	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	

Results: Based on the 14927-STR cells submitted by WiCell QA dated and received on 08/12/19, this sample (Label on Tube: 14927-STR) defines the STR profile of the human cell line PACS1001i-GM27160 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human PACS1001i-GM27160 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 14927-STR sample submitted corresponds to the PACS1001i-GM27160 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 $\sim 2-5\%$.

X RMB	Digitally Signed on	08/21/19	X WMR	Digitally Signed on	08/21/19
, BA TRIP Laboratory, Molecular		UWHC Mole	, PhD, Director / Co-Director ecular Diagnostics Laboratory / UWSN		

Native Product Sterility Report



SAMPLE #:

19081786

DATE RECEIVED:

22-Aug-19

504 S Rosa Road, Rm 101

TEST INITIATED:

28-Aug-19

Madison, WI 53719

WiCell

TEST COMPLETED:

11-Sep-19

SAMPLE NAME / DESCRIPTION:

PACS1001i-GM27160 DB67267 14974 MCW029i-A2757 WB67282 14975 WC048i-17097-02-06 WB67278 14976

WC049i-17097-02-06 WB67278 14976 WC049i-17097-02-07 WB67280 14977

STAN331i-952C3 DB44191 14978 STAN332i-952C5 DB44194 14979 STAN250i-622C2 DB35669 14980

STAN250i-022C2 DB35009 14980 STAN252i-637C2 DB44374 14981 STAN156i-334C1 DB35697 14982 STAN157i-334C2 DB35700 14983

UNIQUE IDENTIFIER:

NA

TEST RESULTS:

		# Positives	
#	# Tested	(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 1250019

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

PCR-based assay performed by WiCell
Lot Release Testing
02Aug19

#	Sample Name	Result	Comments/Suggestions
1	PACS1001i-GM27160-DB67267 14927	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: Anna Lisa Larson, Laboratory Supervisor- Characterization

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A gel image is available upon request.



Cytogenomics

Microarray	Affymetrix Human SNP Array 6.0
Cytogenetic Banding Technique	G-banding
Passage at Analysis	P18
Metaphase Cells Counted	25
Metaphase Cells Analyzed	25
Metaphase Cells Karyotyped	5
Short ISCN	46, XX[25].arr[hg19] 3p14.2p14.1(63,338,522-64,532,276)x1, 22q11.23q12.1(25,393,867-26,090,933)x3]



Figure 5. G-banding karyogram