

Thaw and Culture Details

Cell Line Name	LUEL8357i-3		
WiCell Lot Number	WB66993		
Provider	Luebeck University, Dr. Christine Klein		
Banked By	WiCell		
Thaw and Culture Recommendations	······································		
Culture Platform Feeder Independent			
	Medium: mTeSR™1		
	Matrix: Matrigel®		
Protocol	WiCell Feeder Independent mTeSR™1 Protocol		
Passage Number p14 These cells were cultured for 13 passages prior to freeze and post colony picking. WiCell add the passage number at freeze to best represent what the overall passage number of the cells Plated cells at thaw should be labeled passage 14.			
Date Vialed 11-January-2019			
Vial Label	LUEL8357i-3 p14 WB66993		
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 has provided the following testing and results for this cell line. If available, a link to the relevant publication is provided on the cell line specific web page on the WiCell website.

Test Description	Result	Report
HIV, HBV, and HCV Screening	Negative	Report not available

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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	
14-March-2019	3/14/2019 XG Quality Assurance Signed by Gay, Jenna	

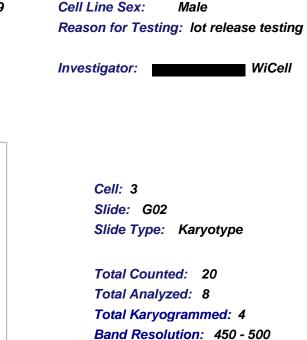
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Date Reported: Thursday, January 31, 2019 Cell Line: LUEL8357i-3-WB66993 14261 Passage#: 14 Date of Sample: 1/22/2019 Specimen: Human IPS Results: 46,XY

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Interpretation:

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

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Completed by: Reviewed and Interpreted by:	-	G(ASCP) D, 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.

HISTOLOGY - IHC - MOLECULAR - IMAGING

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

Sample Report:

14261-STR Sample Name on Tube: 14261-STR 64.9 ng/μL, (A260/280=1.92) Sample Type: Cells Cell Count: ~2 million cells

Short Tandem Repeat Analysis



characterization@wicell.org (608) 316-4145

Receive Date: 01/29/19 Report Sent: 02/05/19 Assay Date: 01/31/19 File Name: STR 190201 wmr Report Date: 02//04/19

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,
CSF1PO	6-15	please, contact WiCell's Technical
D16S539	5, 8-15	Support.
D7S820	6-14	<u>ouppont.</u>
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 14261-STR cells submitted by WiCell QA dated and received on 01/29/19, this sample (Label on Tube: 14261-STR) defines the STR profile of the human stem cell line LUEL8357i-3 comprising 30 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human LUEL8357i-3 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 14261-STR sample submitted corresponds to the LUEL8357i-3 stem 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 02/05/19	X WMR	Digitally Signed on 02/05/19
, 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: 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.

Requestor: WiCell Research Institute Quality Assurance Department

Native Product Sterility Report



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

SAMPLE #:	19020546
DATE RECEIVED:	07-Feb-19
TEST INITIATED:	12-Feb-19
TEST COMPLETED:	26-Feb-19

SAMPLE NAME / DESCRIPTION:

JHU142i DB41344 14264 LUEL8357i-3 WB66993 14265 LUEL8361i-2 WB66989 14266 LUEL7991i-4 WB66994 14267 WC039i-17097-01-22 WB67004 14268 WC040i-17097-01-26 WB67005 14269 WC041i-17097-01-34 WB67002 14270 LUEL7159i-7 WB67001 14271 JHU106i WB67003 14272 LUEL8312i-4 WB67006 14273 WA09 WB66998 14306 WA09 WB66999 14307 WA09 WB67000 14308 STAN269i-720C2 DB44430 14309 STAN371i-868C5 DB44638 14310 WC038i-38-01 WB67007 14311 MIN02i-32517.B WB20619 14312 JHU162i DB36362 14313 STAN175i-373C4 DB44553 14322 STAN176i-373C6 DB44556 14323

UNIQUE IDENTIFIER:

NA

TEST RESULTS:

# Tested	# Positives (Growth)	- Control	
20	1	2 Negatives	

TEST SUMMARY:

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

REFERENCE:

PD #:

Processed according to LAB-003: Sterility Test Procedure 000053

Native Product Sterility Report



COMMENTS:

Sample labeled as "JHU142i DB41344 14264" was positive in both TSB and FTG.

REVIEWED BY

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DATE X

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 WiCell SCB 25Jan19

#	Sample Name	Descelt	Comments/Suggestions
"		Result	
1	LUEL8357i-3-WB66993 14261	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Gustavo Velazquez, Research Specialist - Cytogenetics Reviewed by: Brenna Anderson, Research Specialist - Cytogenetics

Date:

Sent By:____ Sent To_

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A gel image is available upon request.