

Thaw and Culture Details

Cell Line Name	LUEL8312i-4		
WiCell Lot Number	WB67006		
Provider	Luebeck University, Dr. Christine Klein		
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	WiCell Feeder Independent mTeSR™1 Protocol		
Passage Number	p15 These cells were cultured for 14 passages prior to freeze and post colony picking. WiCell 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 15.		
Date Vialed 24-January-2019			
Vial Label	LUEL8312i-4 p15 WB67006		
Biosafety and Use Information Appropriate biosafety precautions should be followed when working with these cells. The er responsible for ensuring that the cells are handled and stored in an appropriate manner. W 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 humans.			

Testing Performed by WiCell

<u> </u>				
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.

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



Approval Date	Quality Assurance Approval	
14-March-2019	3/14/2019 X JKG JKG Quality Assurance Signed by Gay, Jenna	



Chromosome Analysis Report: 074845

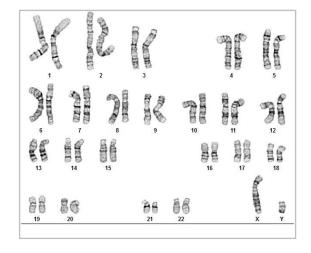
Date Reported: Tuesday, February 05, 2019

Cell Line: LUEL8312i-4-WB67006 14291

Passage#: 15

Date of Sample: 1/29/2019 Specimen: Human IPS

Results: 46,XY



Cell Line Sex: Male

Reason for Testing: Lot Release Testing

Investigator: . WiCell

Cell: 2

Slide: G02

Slide Type: Karyotype

Total Counted: 20 Total Analyzed: 8

Total Karyogrammed: 4 Band Resolution: 450 - 625

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 Analysis HISTOLOGY - IHC - MOLECULAR - IMAGING



characterization@wicell.org

(608) 316-4145

Sample Report: 14291-STR

(608) 265-9168

Sample Name on Tube: 14291-STR

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

Department of Pathology and Laboratory Medicine

 $52.7 \text{ ng/}\mu\text{L}, (A260/280=1.99)$

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute Quality Assurance Department **Receive Date:** 02/04/19 **Report Sent:** 02/08/19 **Assav Date:** 02/06/19

File Name: STR 190206 wmr

Report Date: 02/08/19

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
D16S539	5, 8-15	WiCell's Technical Support.
D7S820	6-14	<u> Бирроп.</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	

Results: Based on the 14291-STR cells submitted by WiCell QA dated and received on 02/04/19, this sample (Label on Tube: 14291-STR) defines the STR profile of the human stem cell line LUEL8312i-4 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human LUEL8312i-4 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 14291-STR sample submitted corresponds to the LUEL8312i-4 stem cell line and was not contaminated with any other human stem 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 stem cell lines is $\sim 2-5\%$.

X RMB	Digitally Signed on	02/08/19	X WMR	Digitally Signed on	02/08/19
TRIP La	, BA boratory, Molecular		UWHC Mole	, PhD, Director / Co-Director ecular Diagnostics Laboratory / UWS	

Native Product Sterility Report



SAMPLE #:

19020546

DATE RECEIVED:

07-Feb-19

TEST INITIATED:

12-Feb-19

TEST COMPLETED:

26-Feb-19

SAMPLE NAME / DESCRIPTION:

504 S Rosa Road, Rm 101

Madison, WI 53719

WiCell

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:

Processed according to LAB-003: Sterility Test Procedure

PD #:

000053

Native Product Sterility Report



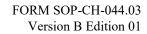
COMMENTS:

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

REVIEWED BY _____

DATE 28 FEB 19

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.



WiCell

Mycoplasma Assay Report PCR-based assay performed by WiCell

PCR-based assay performed by WiCell
Lot Release Testing
29Jan19

#	Sample Name	Result	Comments/Suggestions
1	LUEL8312i-4-WB67006 14291	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Katie Remondini, Cell Culture Specialist
Reviewed by: Sondra Minter Cell Culture Specialist
Date:_____ Sent By:___ Sent To_____

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.

 $A \ gel \ image \ is \ available \ upon \ request.$