Certificate of Analysis

Thaw and Culture Details

Cell Line Name	**JHU067i**	
WiCell Lot Number	**DB36212**	
Provider/Client	Johns Hopkins University – Laboratory of Dr. Lewis Becker	
Banked By	Johns Hopkins University – Laboratory of Dr. Lewis Becker	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using TeSR™-E8™ Medium and Recombinant Human Vitronectin. WiCell recommends thawing using ROCK Inhibitor for best results.	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: Essential 8™ Medium	Matrix: Recombinant Human Vitronectin
Passage Number	p6 Cells were cultured for 6 passages prior to freeze and post reprogramming. Plated cells at thaw should be labeled passage 7.	
Date Vialed	14-February-2016	
Vial Label	P067 P6 1x10^6 2/14/16	
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.	

Certificate of Analysis

Results

Test Description	Test Provider	Test Method	Test Specification	Result
Karyotype	WiCell	G-T-L Banding performed on 20 metaphase cells	Expected karyotype	See Report
	Results: 46,XX ***Interpretation:*** This is a normal karyotype; no clonal abnormalities were detected at the stated band level of resolution.			
Post-Thaw Viable Cell Recovery	WiCell	Thaw using specified Thaw & Culture Recommendations	Recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega™	Defines STR profile of deposited cell line	See Report
Mycoplasma	WiCell	PCR	Amplification of mycoplasma specific DNA detected with negative result	Pass
Sterility	Steris	Native Product Direct Transfer using FTM and TSB (ST/07)	Negative for growth following 14 days of culture	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.

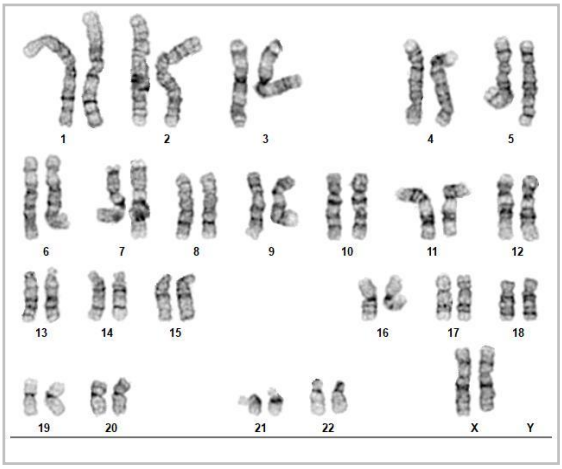
- Embryoid bodies

Approval Date	WiCell Quality Assurance Approval
25-June-2026	6/25/2026 X HEB HEB WiCell Quality Assurance Signed by: Bruner, Haley

Chromosome Analysis Report: 111433

Date Reported: May 17, 2026
Cell Line: JHU067i-DB36212
Submitted Passage #: 7
Date of Sample: 5/11/2026
Specimen: Human IPSC
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: LOT_RELEASE
Investigator: WiCell Stem Cell Bank, WiCell



Cell: 47
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 475

Interpretation:

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

Completed by: Jennifer Pecos, CG(ASCP)
Reviewed and Interpreted by: Justin Schleede, PhD, FACMG

For internal use only

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".

Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell
Report Date: 29May26

Form SOP-89.01
Version 16.0

Sample Name	JHU091i-DB36230 p6	JHU067i-DB36212 p7	CR25-034a1-DB73888 p9	CVCL_D3Y7-DB73673 p36	CVCL_D3YA-DB73672 p37
WiCell CTR No.[1]	111428	111433	111434	111496	111520
FGA	[redacted]				
TPOX					
D8S1179					
vWA					
Amelogenin					
Penta_D					
CSF1PO					
D16S539					
D7S820					
D13S317					
D5S818					
Penta_E					
D18S51					
D21S11					
TH01					
D3S1358					
Allelic Polymorphisms	27	28	26	28	28
Matches[2]				See Results	See Results
Comments					

Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org

[1] CTR No.: Characterization Test Request Number; also known as a laboratory accessioning number.
[2] The STR profile of the sample(s) listed are a 100% match for the given sample unless otherwise specified.

Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell
Report Date: 29May26

Assay Description: Short Tandem Repeat (STR) analysis is performed using the PowerPlex® 16 HS System by Promega™. Results are reported as 13 CODIS STR markers, Amelogenin for sex determination and two low-stutter, highly discriminating pentanucleotide STR markers.

Results: The genotypic profiles comprise a range of 26-28 allelic polymorphisms across the 15 STR loci analyzed. Samples 111496 and 111520 are a 100% match to each other and to 110555, 110556, 111234, 111241, 111259, 111267, 111284, 111295, and additional profiles; they are a 96.67% match to 111285 and 111374. Additional matches can be provided upon request.

Interpretation: 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. These results suggest that the cells submitted correspond to the cell lines as named and were 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 ~2-4%.

6/2/2026	6/2/2026	6/2/2026
X Julia Graham	X Michael Mussar	X Manda Weber
Tech #1 Characterization Signed by: Graham, Julia	Tech #2 Characterization Signed by: Mussar, Michael	QA Approval Quality Assurance Signed by: Weber, Manda

Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell Stem Cell Bank, WiCell

18May26

Form SOP-83.01
Version 7.0

Sample Name	Result	Interpretation
JHU067i-DB36212 p7 (111433)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
JHU091i-DB36230 p6 (111428)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Positive (+) Control	Positive	
Negative (-) Control	Negative	

Assay Description
Sample is tested for presence of mycoplasma using EZ-PCR™ Mycoplasma Detection Kit (Sartorius).

5/18/2026 X Michael Mussar Tech #1 Characterization Signed by: Mussar, Michael	5/18/2026 X Amber Kuhn Tech #2 Characterization Signed by: Kuhn, Amber	5/19/2026 X Dawn Graham QA Review Quality Assurance Signed by: Graham, Dawn

A gel image is available upon request.

Native Product Sterility Report

STERIS

Accounting@wicell.org; WiCell Research Institute
504 S Rosa Road, Rm 101
Madison, WI 53719

SAMPLE #: 25030859
DATE RECEIVED: 22-Mar-25
TEST INITIATED: 28-Mar-25
TEST COMPLETED: 11-Apr-25

SAMPLE NAME / DESCRIPTION:
CBiPS-E12C1-PCBC-WB68767
STAN227i-516C5-DB35603
STAN237i-551C2-DB35694
STAN226i-516C3-DB35595
STAN236i-551C1-DB35687
JHU129i-DB41332
JHU139i-DB36275
JHU216i-DB36861
JHU123i-DB41320
JHU231i-DB37030
JHU220i-DB41414
JHU067i-DB36212
JHU159i-DB41368
JHU124i-DB41323
JHU205i-DB36820
JHU089i-DB41243
JHU200i-DB36800
JHU141i-DB41341
JHU111i-DB36250
JHU074i-DB41131

UNIQUE IDENTIFIER: N/A

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
20	0	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
TEST METHODOLOGY: USP - Direct Transfer

Native Product Sterility Report

STERIS

COMMENTS: Sample #25030859

AUTHORIZED BY _____ DATE 11APR2025

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.