Certificate of Analysis

Thaw and Culture Details

Cell Line Name	**CBiPS-E12C1-PCBC**	
WiCell Lot Number	**WB68767**	
Provider/Client	Johns Hopkins University - Dr. Elias Zambidis	
Banked By	WiCell	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 3 wells of a 6 well plate using mTeSR™1 and Matrigel®.	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: mTeSR™1	Matrix: Matrigel®
Passage Number	p26 Cells were cultured for 25 passages prior to freeze and post colony selection. Plated cells at thaw should be labeled passage 26.	
Date Vialed	16-MARCH-2025	
Vial Label	CBiPS-E12C1-PCBC p26 WB68767 Store at -135C or colder Made in United States Research Use Only	
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	≥ 15 Undifferentiated Colonies prior to passage, ≤ 30% Differentiation prior to passage, and recoverable attachment after passage	Pass
Identity by STR	WiCell	PowerPlex 16 HS System by Promega™	Consistent with 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 Synapse links, where available, are provided on the cell line specific web page on the WiCell website.

- RNA-Seq
- Teratoma representative of all three embryonic germ layers identified in all tumors with histopathological analysis
- Immunostaining analysis to confirm pluripotency and OCT4 to evaluate the presence of undifferentiated PSC
- mRNA, miRNA, and methylation profiling
- Genomics characterization
- Flow Cytometry (SSEA-1, SSEA-4, Tra 1-61,Tra 1-80, CD9, OCT-4)

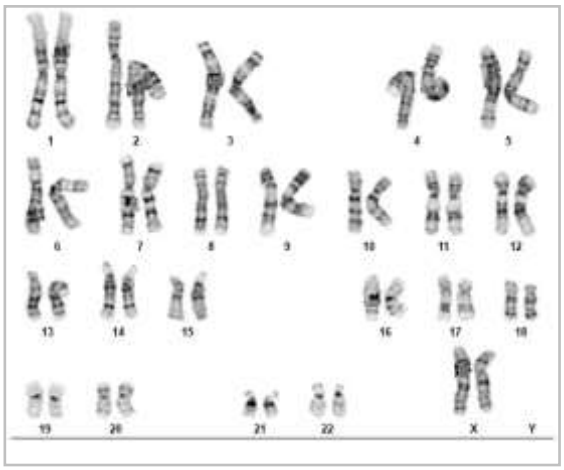
Certificate of Analysis

Approval Date	WiCell Quality Assurance Approval
01-May-2025	5/1/2025 X HEB HEB WiCell Quality Assurance Signed by: HBruner

Chromosome Analysis Report: 106644

Date Reported: April 04, 2025
Cell Line: CBiPS-E12C1-PCBC-WB68767
Submitted Passage #: 26
Date of Sample: 3/26/2025
Specimen: Human IPSC
Results: 46,XX

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



Cell: 15
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 450 - 500

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

Completed by: Erica Schutter, 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
Sample Receipt Date: 26Mar25, 31Mar25
STR Amplification Date: 08Apr25, 17Apr25

Sample Name	CBiPS-E12C1-PCBC-WB68767 p26	STAN237i-551C2-DB35694 p16
WiCell CTR No.[1]	106644	106715
FGA	[redacted]	
TPOX		
D8S1179		
vWA		
Amelogenin		
Penta_D		
CSF1PO		
D16S539		
D7S820		
D13S317		
D5S818		
Penta_E		
D18S51		
D21S11		
TH01		
D3S1358		
Allelic Polymorphisms		
Matches[2]	76811, 101079	106845
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
Sample Receipt Date: 26Mar25, 31Mar25
STR Amplification Date: 08Apr25, 17Apr25

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 27-28 allelic polymorphisms across the 15 STR loci analyzed.

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%.

4/22/2025 X Michael Mussar Tech #1 Characterization Signed by: Mussar, Michael	4/22/2025 X Anna Lisa Larson Tech #2 Characterization Signed by: Larson, Anna Lisa	4/22/2025 X Dawn Graham QA Review Quality Assurance Signed by: Graham, Dawn

Mycoplasma Assay Report

PCR-based assay performed by WiCell

WiCell Stem Cell Bank, WiCell

01Apr25

Form SOP-83.01
Version 7.0

Sample Name	Result	Interpretation
CBiPS-E12C1-PCBC-WB68767 p26 (106644)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
STAN237i-551C2-DB35694 p16 (106715)	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).

4/7/2025 X Steph Dos Santos Tech #1 Characterization Signed by: Dos Santos, Stephany	4/7/2025 X Amber Kuhn Tech #2 Characterization Signed by: Kuhn, Amber	4/8/2025 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.