



Certificate of Analysis

Thaw and Culture Details

Cell Line Name	BCHi013-A-3	
WiCell Lot Number	DB68700	
Provider/Client	Boston Children's Hospital – Dr. Elizabeth Buttermore	
Banked By	Boston Children's Hospital – Dr. Elizabeth Buttermore	
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 4 well of a 6 well plate using mTeSR™ Plus and Matrigel®. WiCell recommends thawing using ROCK Inhibitor for best results.	
Protocol	WiCell Feeder Independent Pluripotent Stem Cell Protocol	
Culture Platform Prior to Freeze	Medium: StemFlex™	Matrix: Matrigel®
Passage Number	p19 Cells were cultured for 19 passages prior to freeze and post reprogramming. Plated cells at thaw should be labeled passage 20.	
Date Vial	17-March-2025	
Vial Label	HNDS0143-01A CC12 (+/+) P19 1 VIAL = 10CM DWW 03-17-25	
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

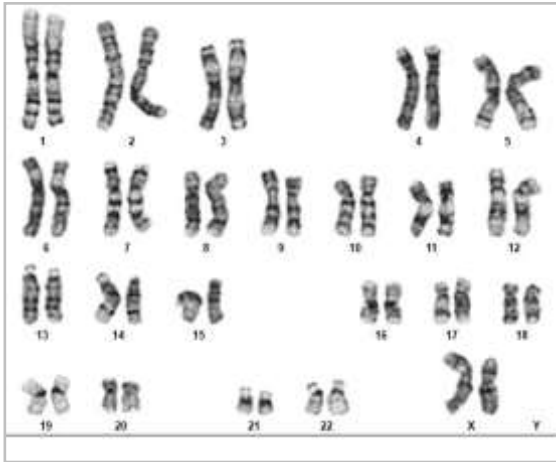
Approval Date	WiCell Quality Assurance Approval
09-April-2026	<div style="text-align: right; font-size: small;">4/9/2026</div> <div style="border: 1px solid black; padding: 2px; width: fit-content;"> <input checked="" type="checkbox"/> HEB <small>HEB WiCell Quality Assurance Signed by: Bruner, Haley</small> </div>

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>.

Date Reported: June 05, 2025
Cell Line: BCHi013-A-3-DB68700
Submitted Passage #: 20
Date of Sample: 6/2/2025
Specimen: Human iPSC
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: LOT_RELEASE

Investigator: WiCell Stem Cell Bank, WiCell



Cell: 23
Slide: G03
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 10
Total Karyogrammed: 5
Band Resolution: 350 - 475

Interpretation:

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

Completed by: Pam Mill
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".

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.



Short Tandem Repeat

Requestor: WiCell Stem Cell Bank, WiCell

Sample Receipt Date: 02Jun25

STR Amplification Date: 17Jun25

Form SOP-89.01

Version 15.0

Sample Name	BCHi013-A-3-DB68700 p20	WIBR3-DB68491 p23
WiCell CTR No.¹	107780	107882
FGA	Identifying information has been redacted to protect donor confidentiality. If more information is required, please contact info@wicell.org	
TPOX		
D8S1179		
vWA		
Amelogenin		
Penta_D		
CSF1PO		
D16S539		
D7S820		
D13S317		
D5S818		
Penta_E		
D18S51		
D21S11		
TH01		
D3S1358		
Allelic Polymorphisms	25	28
Matches²	107779	See Results
Comments		

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

Form SOP-89.01

Version 15.0

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Sample Receipt Date: 02Jun25

STR Amplification Date: 17Jun25

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 25 to 28 allelic polymorphisms across the 15 STR loci analyzed. Sample 107882 is a 100% match to 107916, 107640, 107124, 105684, 107917, 107971, 107881, 107305, 105942, 107471, and additional profiles.

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%.

6/25/2025	6/26/2025	6/27/2025
X Steph Dos Santos	X Amber Kuhn	X Hunter Hefti
<hr/> Tech #1 Characterization Signed by: Dos Santos, Stephany	<hr/> Tech #2 Characterization Signed by: Kuhn, Amber	<hr/> QA Review Quality Assurance Signed by: Hefti, Hunter

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Mycoplasma Assay Report

PCR-based assay performed by WiCell
 WiCell Stem Cell Bank, WiCell
 03Jun25

Form SOP-83.01
 Version 7.0

Sample Name	Result	Interpretation
CVCL_C7VH-DB68456 p33 (107782)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
CVCL_C7VY-DB68452 p33 (107781)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
BCHi013-A-3-DB68700 p20 (107780)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
BCHi013-A-1-DB68699 p20 (107779)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 995 30May25 NM 1/1 (107775)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 839 30May25 MEFs 1/2 (107774)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 995 30May25 JG 1/1 (107773)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 839 30May25 MEFs 2/2 (107772)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 995 30May25 KC 1/1 (107771)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 994 30May25 JG 1/1 (107770)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 845 30May25 AP 1/1 (107769)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 994 30May25 KC 1/1 (107767)	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma.
Incubator 994 30May25 NM 1/1 (107766)	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).

6/5/2025	6/5/2025	6/5/2025
X Steph Dos Santos <hr/> Tech #1 Characterization Signed by: Dos Santos, Stephany	X John Raff <hr/> Tech #2 Characterization Signed by: Raff, John	X Dawn Graham <hr/> QA Review Quality Assurance Signed by: Graham, Dawn

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A gel image is available upon request.



Short Tandem Repeat

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STR Amplification Date: 17Jun25

Form SOP-89.01

Version 15.0

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WiCell CTR No. ¹	107780	107882
FGA	18, 19	22, 23
TPOX	8, 11	8, 9
D8S1179	13, 14	11, 13
vWA	15, 19	14, 20
Amelogenin	X, X	X, X
Penta_D	9, 12	9, 13
CSF1PO	13, 13	10, 12
D16S539	12, 12	11, 13
D7S820	10, 10	10, 11
D13S317	11, 11	11, 14
D5S818	12, 13	11, 12
Penta_E	9, 11	7, 18
D18S51	16, 17	16, 16
D21S11	30, 30	30, 32.2
TH01	6, 9	9.3, 9.3
D3S1358	15, 16	14, 17
Allelic Polymorphisms	25	28
Matches ²	107779	See Results
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