

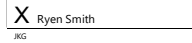


Thaw and Culture Details

Cell Line Name	STAN044i-124-2
WiCell Lot Number	WB67206
Provider	Stanford University – Laboratory of Dr. Marlene Rabinovitch
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: TeSR™-E8™
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent E8 Medium Protocol
Passage Number	p13 These cells were cultured for 12 passages prior to freeze and post reprogramming. 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 13.
Date Vialied	25-May-2019
Vial Label	STAN044i-124-2 p13 WB67206
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.

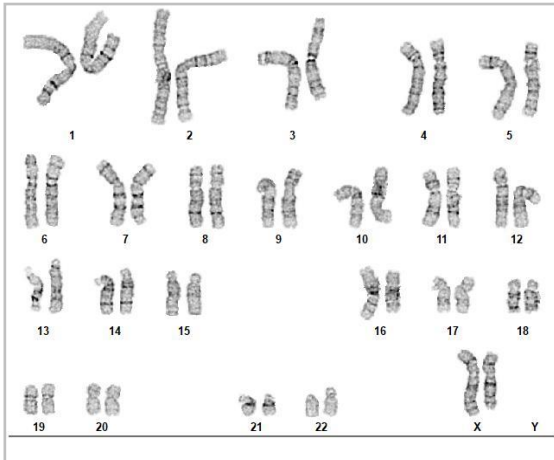
Testing Performed by WiCell

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

Approval Date	Quality Assurance Approval
02-July-2019	<div style="text-align: right; font-size: small;">7/19/2023</div>  <div style="font-size: x-small;"> X Ryen Smith JKG Quality Assurance Signed by Smith, Ryen </div>

Date Reported: Monday, June 17, 2019
Cell Line: STAN044i-124-2-WB67206 14773
Passage#: 13
Date of Sample: 6/5/2019
Specimen: Human IPS
Results: 46,XX

Cell Line Sex: Female
Reason for Testing: lot release testing
Investigator: [REDACTED], WiCell



Cell: 25
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 500 - 600

Interpretation:

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

Completed by: [REDACTED] CG(ASCP)
Reviewed and Interpreted by: [REDACTED] 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.

Short Tandem Repeat Analysis

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

characterization@wicell.org
(608) 316-4145

Sample Report:

14773-STR

Sample Name on Tube: 14773-STR

60.7 ng/μL, (A260/280=2.06)

Sample Type: Cells

Cell Count: ~2 million cells

Requestor:

WiCell Research Institute

Quality Assurance Department

Receive Date: 06/10/19

Report Sent: 06/14/19

Assay Date: 06/12/19

File Name: STR 190613 wmr

Report Date: 06/14/19

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 been redacted to protect donor confidentiality. If more information is required, please, contact WiCell's Technical Support .
TPOX	6-13	
D8S1179	7-18	
vWA	10-22	
Amelogenin	X,Y	
Penta_D	2.2, 3.2, 5, 7-17	
CSF1PO	6-15	
D16S539	5, 8-15	
D7S820	6-14	
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 14773-STR cells submitted by WiCell QA dated and received on 06/10/19, this sample (Label on Tube: 14773-STR) defines the STR profile of the human cell line STAN044i-124-2 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human STAN044i-124-2 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 14773-STR sample submitted corresponds to the STAN044i-124-2 cell line and was 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 ~2-5%.

X *RMB*

Digitally Signed on 06/14/19

X *WMR*

Digitally Signed on 06/14/19

██████████, BA
TRIP Laboratory, Molecular

██████████, PhD, Director / Co-Director
UWHC Molecular 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: <https://research.pathology.wisc.edu/acknowledging-trip/>
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Native Product Sterility Report



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

SAMPLE #: 19060913
DATE RECEIVED: 12-Jun-19
TEST INITIATED: 14-Jun-19
TEST COMPLETED: 28-Jun-19

SAMPLE NAME / DESCRIPTION: STAN204i-448C1 WB67189 14791
MCW013i-A2767 WB67191 14792
JHU242i DB37058 14793
MCW085i-40002118 WB67193 14794
MCW081i-U7128 WB67194 14795
STAN043i-124-1 WB67196 14796
STAN038i-118-2 WB67197 14797
MCW007i-U2456 WB67198 14798
MCW096i-40000169 WB67199 14799
MCW074i-40002460 WB67203 14800
MCW110i-U2170 WB67204 14801
STAN044i-124-2 WB67206 14802
MCW105i-U2130 WB67207 14803
MCW103i-40000237 WB67208 14804
MCW101i-40001005 WB67209 14805
hIPSC-Di21-c2-4-4 WB67210 14806
WA07 WB67212 14807
WA07 WB67213 14808
MCW021i-50001743 WB67214 14809
hIPSC-Di21-c2-4-3 WB67215 14810

UNIQUE IDENTIFIER: NA

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



COMMENTS: NA

REVIEWED BY 

DATE 28 JUN 14

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

Lot Release Testing

04Jun19

FORM SOP-CH-044.03

Version B Edition 02

#	Sample Name	Result	Comments/Suggestions
1	STAN044i-124-2-WB67206 14773	Negative	Band was not seen at 270bp, indicating the absence of mycoplasma
2	Positive (+) Control	Positive	
3	Negative (-) Control	Negative	

Reported by: Sondra Minter, Cell Culture Specialist

Reviewed by: Katie Remondini, Cell Culture Specialist

Date: _____ **Sent By:** _____ **Sent To:** _____

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A gel image is available upon request.