



Thaw and Culture Details

Cell Line Name	UCSD012i-5-5
WiCell Lot Number	WB54412
Provider	University of California, San Diego – Dr. Kelly Frazer
Banked By	WiCell
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 4 wells of a 6 well plate.
Culture Platform	Feeder Independent
	Medium: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 Protocol
Passage Number	p25 These cells were cultured for 24 passages prior to freeze and post reprogramming. WiCell adds +1 to the passage number to best represent the overall passage number of the cells at thaw.
Date Vialied	11-December-2016
Vial Label	UCSD012i-5-5 p25 WB54412
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-QU-004	Negative	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.

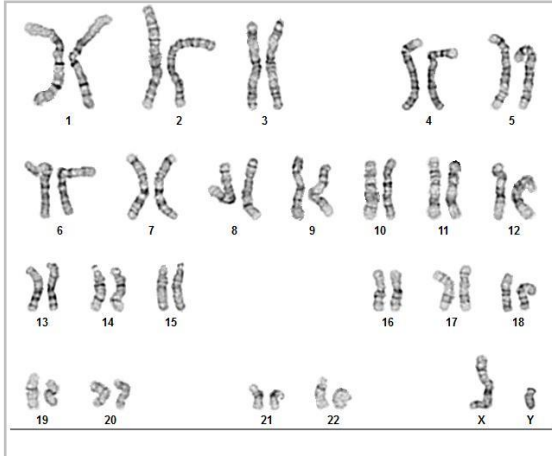
- Illumina® HumanCoreExome BeadChip Array
- RNA-Seq
- Flow Cytometry (SSEA-4, Tra 1-81)
- Infinium® Expanded Multi-Ethnic Genotyping Array (MEGA^{EX})



Approval Date	Quality Assurance Approval
04-January-2017	<p style="text-align: right;">9/27/2018</p> <p>X JKG JKG Quality Assurance Signed by: Gay, Jenna</p>

Date Reported: Monday, July 09, 2018
Cell Line: UCSD012i-5-5-WB54412 13840
Passage#: 25
Date of Sample: 7/2/2018
Specimen: Human IPS
Results: 46,XY

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



Cell: 45
Slide: G01
Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8
Total Karyogrammed: 4
Band Resolution: 475 - 525

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

A signed copy of this report is available upon request.

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.

Sample Report:

13840-STR

Sample Name on Tube: 13840-STR79.8 ng/ μ L, (A260/280=1.75)**Sample Type:** Cells**Cell Count:** ~2 million cells**Requestor:**

WiCell Research Institute

Quality Department

Sample Date: N/A**Receive Date:** 07/09/18**Assay Date:** 07/11/18**File Name:** STR 180712 wmr**Report Date:** 07/18/18

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 13840-STR cells submitted by WiCell QA dated and received on 07/09/18, this sample (Label on Tube: 13840-STR) defines the STR profile of the human stem cell line UCSD012i-5-5 comprising 27 allelic polymorphisms across the 15 STR loci analyzed.

Interpretation: No STR polymorphisms other than those corresponding to the human UCSD012i-5-5 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 13840-STR sample submitted corresponds to the UCSD012i-5-5 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 ~2-5%.

 X_{RMB}

Digitally Signed on 07/19/18

 X_{WMR}

Digitally Signed on 07/19/18

 BA
TRIP Laboratory, Molecular PhD, Director / Co-Director
UWHC Molecular Diagnostics Laboratory / UWSPH TRIP Laboratory

Native Product Sterility Report



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

SAMPLE #: 17060070
DATE RECEIVED: 01-Jun-17
TEST INITIATED: 02-Jun-17
TEST COMPLETED: 16-Jun-17

SAMPLE NAME / DESCRIPTION: iPS(IMR90)-4 WB65317 12534
iPS(IMR90)-4 WB65316 12535
HVRDi002-A WB65326 12536
LT2e-H9CAGGFP WB38197 12537
H9 hNanog-pGZ WB35898 12538
UCSD001i-5-1 WB54521 12539
UCSD009i-5-2 WB61622 12540
USCD010i-5-3 WB57058 12541
UCSD011i-5-4 WB64802 12542
UCSD012i-5-5 WB54412 12543

**CORRECTED
REPORT**

UNIQUE IDENTIFIER: NA
PRODUCT REGISTRATION: Human iPS cells

TEST RESULTS:

# Tested	# Positives (Growth)	- Control
10	0	2 Negatives

TEST SUMMARY:

# Samples	Media Type	Volume (mL)	Incubation Temperature (° C)	Incubation Duration (Days)
10	TSB	40	20-25	14
10	FTG	40	30 - 35	14

REFERENCE: Processed according to LAB-003: Sterility Test Procedure
METHOD VALIDATION / PD #: 000053
TEST METHODOLOGY: USP - Direct Transfer

COMMENTS: Report revised due to corrected Sample Name.

REVIEWED BY 

DATE 20JUN17

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.



Mycoplasma Detection Assay Report

Testing Performed by WiCell

Lot Release Testing

July 5, 2018

FORM SOP-QU-004.01

Version G Edition 02

Reported by: AP

Reviewed by: JB

BD Monolight 180

#	Sample Name	Reading A			Reading B			Ratio B/A	Result	Comments/Suggestions
		RLU1	RLU2	Ave	RLU1	RLU2	Ave			
1	UCSD012i-5-5-WB54412 13840	271	246	258.5	118	116	117	0.45	Negative	
2	Positive (+) Control	390	381	385.5	61000	61163	61082	158.45	Positive	
3	Negative (-) Control	820	821	820.5	113	101	107	0.13	Negative	

