

#### **Thaw and Culture Details**

Cell Line Name	UCSD231i-SAD1-3					
WiCell Lot Number	DB26804					
Provider	University of California, San Diego – Laboratory of Dr. Lawrence Goldstein					
Banked By	University of California, San Diego – Laboratory of Dr. Lawrence Goldstein					
Thaw and Culture Recommendations	WiCell recommends thawing 1 vial into 5 wells of a 6 well plate using Stem Cell Culture Medium and MEF. WiCell recommends thawing using ROCK Inhibitor for best results.					
Protocol	WiCell Feeder Dependent Protocol					
Culture Platform Prior to Freeze	Feeder Dependent					
	Medium: hUES Medium					
	Matrix: MEF					
Passage Number	p22 These cells were cultured for 21 passages prior to freeze and post reprogramming. The Provider adds +1 to the passage number to best represent the overall passage number of the cells at thaw.					
Date Vialed	16-July-2015					
Vial Label	iPS SAD1.3 (81495 G) p22 7/16/15 ch thaw in 6 well					
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
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	Biotest Laboratories	ST/07	Negative	Pass
Mycoplasma	WiCell	SOP-QU-004	Negative	Pass
Karyotype by G-banding	WiCell	SOP-CH-003	Report karyotype	Pass



Testing Reported by Provider

For more information, publication and dbGaP links, where available, are provided on the cell line specific web page on the WiCell website.

Test Description	Method	Result			
Genetic Analysis	G-Band Karyotype	Maintained euploid karyotype			
Pluripotency	FACS	Expressed the pluripotency-associated proteins NANOG and TRA1-81.  See the publication for Mean % TRA1-81.			
Teratoma	Injected into nude rats	Differentiated into cells of ectodermal, mesodermal, and endodermal lineages in vitro.			

Approval Date	Quality Assurance Approval		
30-June-2016	8/6/2020  X AA  AA  Quality Accurance Signed by: Arest, Andy		



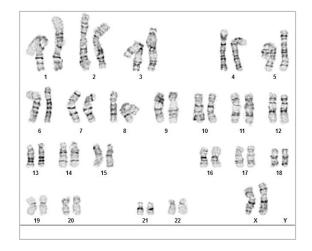
#### Chromosome Analysis Report: 057678

Date Reported: Monday, January 23, 2017 Cell Line: UCSD231i-SAD1-3-DB26804 12123

Passage#: 22

Date of Sample: 1/17/2017

Specimen: iPSC Results: 46,XX



Cell Line Gender: Female

Reason for Testing: lot release testing

Investigator: , WiCell CDM

Cell: 21 Slide: 3

Slide Type: Karyotype

Total Counted: 20
Total Analyzed: 8

Total Karyogrammed: 4
Band Resolution: 450 - 500

QC Review By: \_\_\_\_

#### Interpretation:

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

Sent By:\_\_\_\_ Sent To:\_\_

cell populations in this specimen (i.e.,mosaicism) is limited by the number of metaphase cells examined, documented here as "# of cells counted".

Completed by:	, CG(ASCP)
Reviewed and Interpreted by:	, PhD, FACMG

A signed copy of this report is available upon request.

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, be	and 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 karvogran	ns in this assay Detection of heterogeneity of clonal

This assay was conducted solely for listed investigator/institution. The results may not be relied upon by any other party without the prior written consent of the Director of the WiCell Cytogenetics Laboratory. The results of this assay are for research use only. If the results of this assay are to be used for any other purpose, contact the Director of the WiCell Cytogenetics Laboratory.

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### Short Tandem Repeat Analysis

WiCell® info@wicell.org (888) 204-1782

Department of Pathology and Laboratory Medicine TRIP Laboratory (Molecular)

http://www.pathology.wisc.edu/research/trip

**Sample Report:** 12123-STR

**Sample Name on Tube:** 12123-STR

 $135.6 \text{ ng/}\mu\text{L}, (A260/280=1.96)$ 

Sample Type: Cells

Cell Count: ~2 million cells

**Requestor:** 

WiCell Research Institute Ouality Department **Sample Date:** N/A **Receive Date:** 01/23/17

Assay Date: 01/24/17 File Name: STR 170125 wmr

**Report Date:** 01/26/17

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					
TPOX							
D8S1179	7-18	been redacted to protect donor					
vWA	10-22	confidentiality. If					
Amelogenin	X,Y	more information					
Penta D	2.2, 3.2, 5, 7-17	is required,					
CSF1PO	6-15	please, contact WiCell's Technica					
D16S539	5, 8-15	Support.					
D7S820	6-14	. <u>Oupport.</u>					
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						

<u>Results:</u> Based on the 12123-STR cells submitted by WiCell QA dated and received on 01/23/17, this sample (Label on Tube: 12123-STR) defines the STR profile of the human stem cell line UCSD231i-SAD1-3 comprising 26 allelic polymorphisms across the 15 STR loci analyzed.

<u>Interpretation:</u> No STR polymorphisms other than those corresponding to the human UCSD231i-SAD1-3 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 12123-STR sample submitted corresponds to the UCSD231i-SAD1-3 stem cell line and was not contaminated with any other human stem cells or a significant amount of mouse feeder layer cells.

<u>Sensitivity:</u> 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	01/27/17	X WMR	Digitally Signed on	01/27/17
TRIP La	boratory, Molecular	_	UWHC Mole	, PhD, Director / Co-Directo ecular Diagnostics Laboratory / UWS	

#### Sterility Report

#### Biotest Laboratories, Inc.

Making life-saving products possible

# CORRECTED REPORT

WiCell Research Institute, Inc. WiCell Quality Assurance

504 South Rosa Road, Room 101

Madison, WI 53719

BIOTEST SAMPLE#

16120579

VALIDATION #

NG

TEST PURPOSE

NG

PRODUCT

UCSD135i-81-1 WB52272 12052 UCSD194i-29-1-WB52612 12053 UCSD077i-1-8 WB52432 12054 UCSD116i-71-1-WB52431 12055 UCSD222i-120-1-WB52614 12056 UCSD070i-1-1-WB52613 12057 UCSD003i-16-2-WB53533 12058 UCSD221i-119-1-WB53573 12059 UCSD192i-13-2-WB53109 12060 UCSD231i-SAD1-3-DB26804 12062

PRODUCT LOT

NA

STERILE LOT

NA

**BILOT** 

NA

STERILIZATION LOT

NA

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BI EXPIRATION DATE NA

STERILIZATION DATE

NA

DATE RECEIVED

2016-12-08

STERILIZATION METHOD NA

TEST INITIATED

2016-12-09

SAMPLING BLDG / ROOM NA

TEST COMPLETED

2016-12-23

REFERENCE

Processed according to LAB-003: Sterility Test Procedure

Ten (10) products were each divided between 40 mL TSB and 40 mL FTG. The samples were then cultured at 20-25 C and 30-35 C respectively and were monitored for a

minimum of 14 days.

**USP** 

☐ BI Manufacturers Specifications

☐ Other

**RESULTS** 

Sterile

# POSITIVES 0

# TESTED

POSITIVE CONTROL

**NEGATIVE CONTROL** 

NA

2 Negative

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. Liability is limited to the costs of the tests.

The uncertainty of measurement associated with the measurement result reported in this certificate is available from the organization upon request.



### Biotest Laboratories, Inc.

Making life-saving products possible

CORRECTED REPORT

BIOTEST SAMPLE # 16120579

COMMENTS Report revised due to missing product name.

REVIEWED BY

DATE

Specific test results may not be indicative of the characteristics of any other samples from the same lot or similar lots. Liability is limited to the costs of the tests.





## Mycoplasma Detection Assay Report Testing Performed by WiCell

Testing Performed by WiCell Lot Release Testing January 17, 2017

FORM SOP-QU-004.01 Version F Edition 02 Reported by:OG Reviewed by: JB Berthold Flash n' Glo 539

		Read	ling A	A	Read	ling B	В	Ratio		
#	Sample Name	RLU1	RLU2	Ave	RLU1	RLU2	Ave	B/A	Result	Comments/Suggestions
1	UCSD231i-SAD1-3-DB26804 12123	171	171	171	63	57	60	0.35	Negative	
2	Positive (+) Control	124	117	120.5	7249	7237	7243	60.11	Positive	
3	Negative (-) Control	234	229	231.5	28	25	26.5	0.11	Negative	

