



## Thaw and Culture Details

Cell Line Name	<b>HVRDi002-A-1</b>
WiCell Lot Number	<b>WB66253</b>
Parent Material	HVRDi002-A-1-DB46579
Provider	Brigham & Women's Hospital – Dr. Tracy Young-Pearse
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: mTeSR™1
	Matrix: Matrigel®
Protocol	WiCell Feeder Independent mTeSR™1 Protocol
Passage Number	p37 These cells were cultured for 36 passages after colony picking. WiCell adds +1 to the passage number to best represent the overall passage number of the cells at thaw.
Date Vialied	07-June-2017
Vial Label	HVRDi002-A-1 p37 WB66253
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

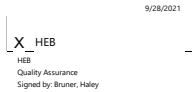
Test Description	Test Provider	Test Method	Test Specification	Result
Karyotype by G-banding	WiCell	SOP-CH-003	Expected karyotype	Pass
Post-Thaw Viable Cell Recovery	WiCell	SOP-CH-305	≥ 15 Undifferentiated Colonies, ≤ 30% Differentiation and recoverable attachment after passage	Pass
Identity by STR	UW Translational Research Initiatives in Pathology Laboratory	PowerPlex 16 HS System by Promega	Defines STR profile of deposited cell line	Pass
Sterility	Biotest Laboratories	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.

- Expression of MAP2, Tau and TuJ1, markers of upper (Cux1) and lower (Tbr1) layer cortical neurons and synaptic markers synaptophysin (SYP), PSD95 and VGLUT1 by immunostaining
- Embryoid body formation and in vitro differentiation to ectodermal, mesodermal, and endodermal lineage

Approval Date	Quality Assurance Approval
11-August-2017	

**Date Reported:** Wednesday, June 21, 2017

**Cell Line Gender:** Female

**Cell Line:** HVRDi002-A-1-WB66253 12560

**Reason for Testing:** lot release testing

**Passage#:** 36

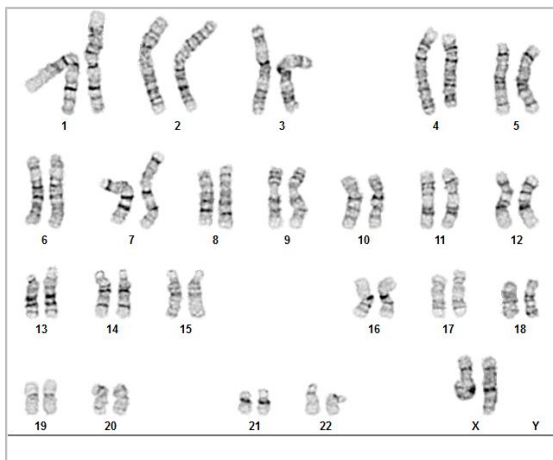
**Date of Sample:** 6/13/2017

**Investigator:** [REDACTED], WiCell CDM

**Specimen:** Human iPSC

**Results:** 46,XX

**Nonclonal findings:** 46,XX,t(7;18)(p13;p11.2)



**Cell:** 85

**Slide:** G01

**Slide Type:** Karyotype

**Total Counted:** 20

**Total Analyzed:** 8

**Total Karyogrammed:** 4

**Band Resolution:** 450 - 550

**Interpretation:**

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

**There is one nonclonal finding, listed above. Nonclonal findings likely result from technical artifact, but may be due to a developing clonal abnormality or to low-level mosaicism.**

**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 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.*

*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](http://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)  
<http://www.pathology.wisc.edu/research/trip>

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

**Sample Report:**

12560-STR  
**Sample Name on Tube:** 12560-STR  
68.1 ng/μL, (A260/280=1.91)  
**Sample Type:** Cells  
**Cell Count:** ~2 million cells

**Requestor:**

WiCell Research Institute  
Quality Department

**Sample Date:** N/A

**Receive Date:** 06/19/17  
**Assay Date:** 06/20/17  
**File Name:** STR 170621 wmr  
**Report Date:** 06/23/17

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 been redacted to protect donor confidentiality. If more information is required, please, contact <a href="#">WiCell's Technical Support</a> .
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 12560-STR cells submitted by WiCell QA dated and received on 06/19/17, this sample (Label on Tube: 12560-STR) defines the STR profile of the human stem cell line HVRDi002-A-1 comprising 29 allelic polymorphisms across the 15 STR loci analyzed.

**Interpretation:** No STR polymorphisms other than those corresponding to the human HVRDi002-A-1 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 12560-STR sample submitted corresponds to the HVRDi002-A-1 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 06/23/17

**X** *WMR* Digitally Signed on 06/23/17

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: <http://www.pathology.wisc.edu/research/trip/acknowledging> TRIP agrees to maintain the confidentiality of any information provided to it in connection with its performance of this STR analysis on the same conditions as set forth in paragraph 2 of WiCell's Terms and Conditions of Service (<http://www.wicell.org/media.acux/1a429b84-2b54-44a4-8ad8-5c05db93dd8a>).

# Native Product Sterility Report



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

SAMPLE #: 17071248  
DATE RECEIVED: 20-Jul-17  
TEST INITIATED: 24-Jul-17  
TEST COMPLETED: 07-Aug-17

SAMPLE NAME / DESCRIPTION: HVRDi002-A-1-WB66253 12586  
WA01-WB66269 12611  
UCSD238i-APP1-3-DB26825 12612  
UCSD223i-NDC1-1-WB66285 12613  
WC025i-FXS-Nluc2-WB66292 12614  
WC024i-FXS-Nluc1-WB66443 12615  
WIC09i-02-11E-WB66435 12616  
CREM023i-SS35-1-WB66438 12617  
WIC08i-02-11E-WB66437 12618  
UCSD239i-APP2-1-WB66436 12619

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: NA

REVIEWED BY *D. S. S. S.*

DATE 08AUG17

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

June 15, 2017

FORM SOP-QU-004.01

Version F Edition 02

Reported by: KR

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	HVRDi002-A-1-WB66253 12560	224	224	224	96	91	93.5	0.42	Negative	
2	Positive (+) Control	360	365	362.5	39997	40090	40044	110.46	Positive	
3	Negative (-) Control	605	615	610	76	69	72.5	0.12	Negative	

