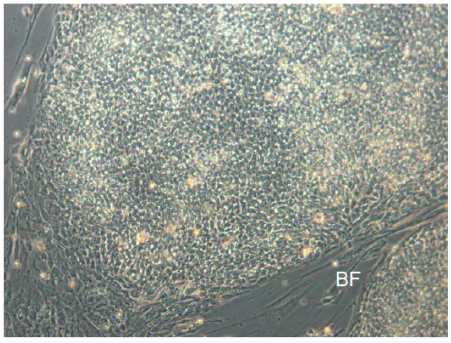
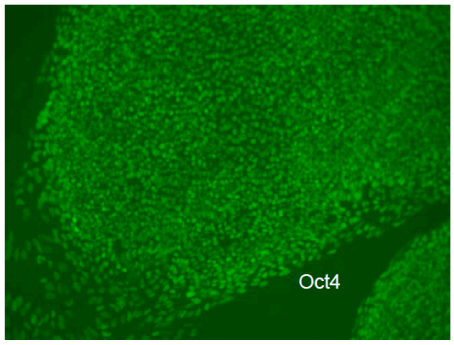
Stem Cells and
Regenerative Medicine

hiPS clone 16
Characterization Report





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Stem Cells and Regenerative Medicine

Cell Line Description	hiPS generated from primary fibroblast
Species	Human
Cell Line	hiPSTZ clone 16
Passage	P-9
Date Frozen	30-Sep-09
Substrate	Mouse embryonic feeders

Karyotype	Normal
Fluorescent in Situ hybridization	Normal
Flow Cytometry	92.4 % Double labeled Oct3/4 SSEA 4
Mycoplasma	Negative
Teratoma Assay	Positive
STR Marker /genetic profile	Match ATCC CRL2097
Hepatitis A, B, C	Negative by PCR
HIV1 and HIV2	Negative by PCR

Stem Cells and Regenerative Medicine

Texas Children's Hospital
Clinical and Research Cytogenetic Laboratory
1102 Bates Street, Suite C1070.20
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Phone: (832)-824-4768 Fax: (832)-825-4846
Email: Cytogenetics@TexasChildrensHospital.org

Received: Sep 2008

Principle Investigator: Ana M. Crane Ph.D
hES Cell Culture Core Leader

CYTOGENETIC RESEARCH REPORT

SPECIMEN:
Human Embryonic Cell Lines

TECHNIQUES EMPLOYED:
G-Banding

RESULTS:

Cell line	Karyotype
hiPSTZ#16p16Nov3-08	46,XY[24]

INTERPRETATION:

Chromosome analysis of hiPSTZ**#16p16Nov3-08** revealed a normal male karyotype in all analyzed metaphase spreads.

Low-level mosaicism and subtle chromosomal abnormalities may not be detectable by the techniques employed in the present study.

Interpretation By:
Pulivarthi Rao, Ph.D., Associate Director of Research
Clinical and Research Cytogenetics/Molecular Laboratory

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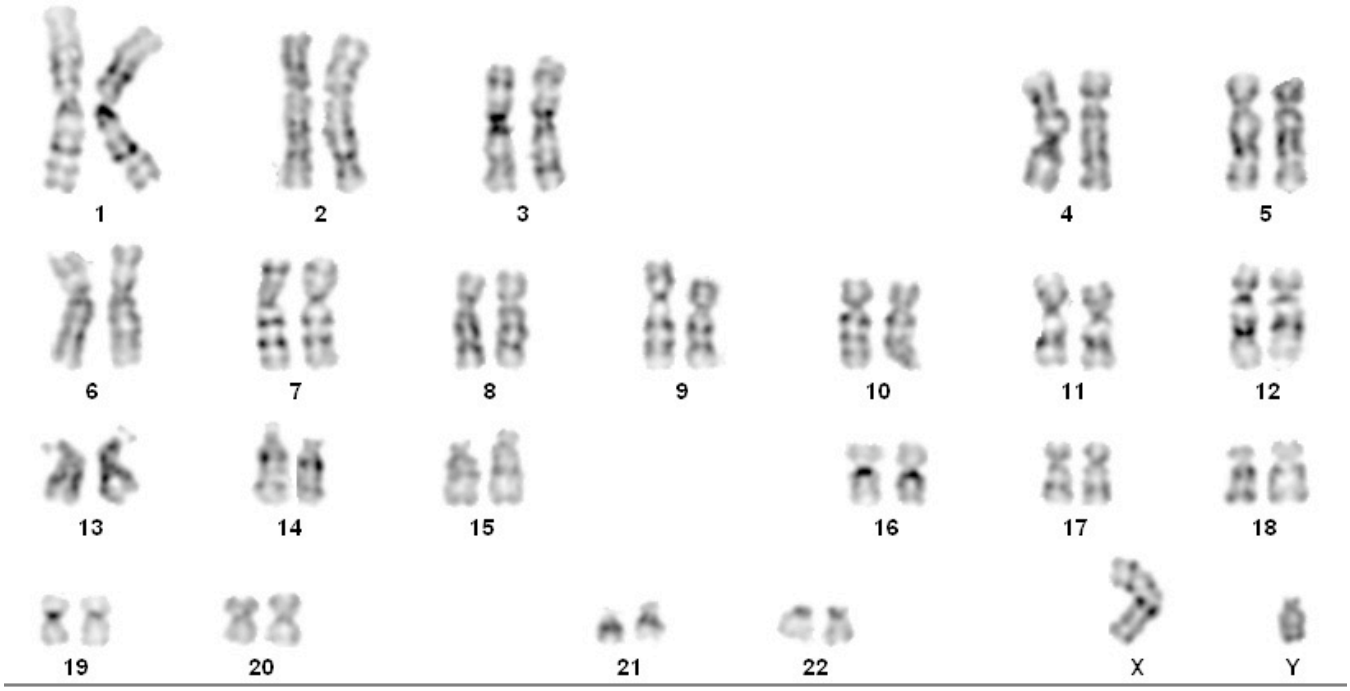
G-banded Karyotype
Texas Children's Hospital



hiPSTZ clone 16 P16 November 3, 2008

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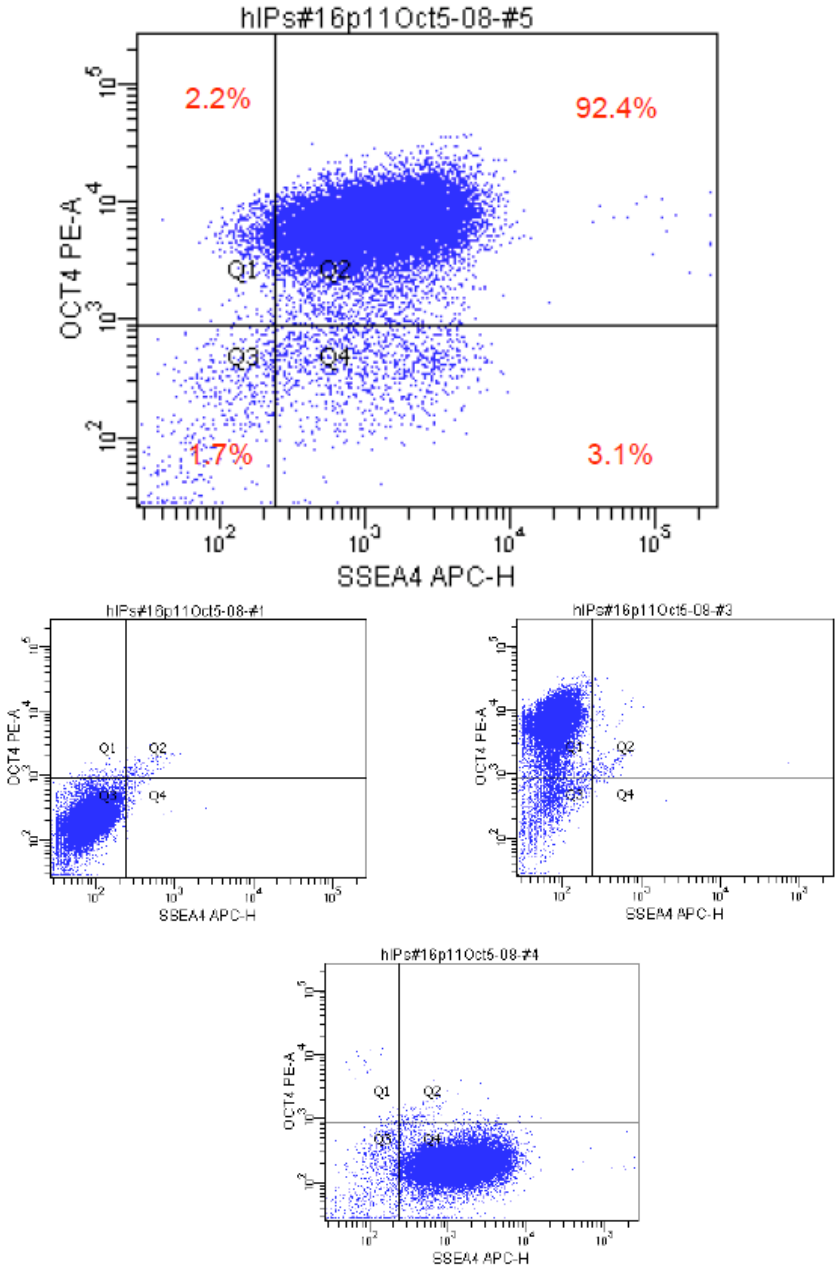
Flow Cytometry

Oct 3/4 SSEA-4 Double Labeled SOP-0013.0 by AMC.PZ



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Phone: (832)-824-4768 Fax: (832)-825-4846
Email: Cytogenetics@TexasChildrensHospital.org

Received: 09/10/08

Principle Investigator: Ana M. Crane Ph.D.

hES Cell

Culture Core Leader

CYTOGENETIC REPORT

SPECIMEN:
Human Embryonic Cell Lines

TECHNIQUES EMPLOYED:
Fluorescence in situ hybridization (FISH)

RESULTS:

Normal FISH results

INTERPRETATION:

FISH evaluation of cell line - **hiPs#16 clone-p6 Sep7-08** using probes specific for chromosome 12 and 17 centromeres revealed a normal pattern in 200 interphase nuclei and 10 metaphase spreads for each probe and cell line.

Low-level mosaicism and subtle chromosomal abnormalities may not be detectable by the techniques employed in the present study.

Interpretation By:
Pulivarthi Rao, Ph.D., Associate Director of Research
Clinical and Research Cytogenetics/Molecular Laboratory

Stem Cells and
Regenerative Medicine

FINAL REPORT OF LABORATORY EXAMINATION
Research Animal Diagnostic Laboratory
4011 Discovery Drive, Columbia MO 65201
1-800-669-0825 1-573-882-5983
radil@missouri.edu www.radil.missouri.edu

CASE NUMBER: 20024-2008

RECEIVED ON: 10/14/2008
COMPLETED ON: 10/21/2008

SUBMITTED BY:

Ana Crane
Baylor College of Medicine
One Baylor Plaza
Houston, TX 77030
(713) 798-1273
[713] 798=1230 (fax)

SPECIMEN DESCRIPTION:
SPECIES: Human
DESCRIPTION: cells
NUMBER OF SPECIMENS: 5

PURCHASE ORDER #: po#5600374310

ID	Test Performed
MEF AMC	Mycoplasma sp.
MEF Saunghee	Mycoplasma sp.
MEF Lonela	Mycoplasma sp.
hiPS#16p11	hIMPACT
hiPS#11p12	hIMPACT

PROFILE/EXAM REQUESTED: h-IMPACT; Mycoplasma sp. - PCR

PCR evaluation for: Hantaan, Hepatitis A, Hepatitis B, Hepatitis C, HIV1, HIV2, *Mycoplasma* sp., Seoul, Sin Nombre

SUMMARY: All test results were negative.

If you have questions, please call our toll free number at 1-800-669-0825 or e-mail us at radil@missouri.edu.

PCR EVALUATION:

Specimen: cells	hiPS#16p11	hiPS#11p12
Hepatitis A	-	-
Hepatitis B	-	-
Hepatitis C	-	-
HIV1	-	-
HIV2	-	-
Hantaan	-	-
Mycoplasma sp.	-	-
Seoul	-	-
Sin Nombre	-	-

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CASE NUMBER: 20280-2008

RECEIVED ON: 10/17/2008
COMPLETED ON: 10/20/2008

SUBMITTED BY:

Ana Crane
Baylor College of Medicine
One Baylor Plaza
Houston, TX 77030
(713) 798-1273
[713] 798=1230 (fax)

SPECIMEN DESCRIPTION:
SPECIES: Human
DESCRIPTION: cells
NUMBER OF SPECIMENS: 1

PURCHASE ORDER #: 100895845

ID	ATCC #
hiPS#16p11	CRL-2097 CCD-1079Sk

PROFILE/EXAM REQUESTED: Cell Check

GENERAL COMMENTS: Cell check - ID: hiPS#16p11 from Case 20024-2008. ATCC CRL-2097 CCD-1079Sk.

SUMMARY: This sample was previously submitted as part of Case #20024-2008. The sample (hiPS#16p11) was positive for both human and mouse genomic DNA. This was not unexpected since the cell line is of human origin but is grown on mouse feeder cells. No other inter-species contamination was detected. The alleles for 9 different STR markers were determined and the results were compared to the allele sizes for CCD-1079Sk (CRL-2097) reported by ATCC. The genetic profile for the sample was consistent with the genetic profile reported by ATCC for this cell line.

If you have questions, please call our toll free number at 1-800-669-0825 or e-mail us at radil@missouri.edu.

PCR EVALUATION:

(LEGEND: + = positive - = negative id:id = pooled sample blank = test not performed equ = equivocal NT or blank = no test performed sus = suspect wps = weak positive)

CELL CHECK:

Species-specific PCR Evaluation

Species	hiPS#16p11
mouse	+
rat	-
human	+
Chinese hamster	-

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CASE NUMBER: 20280-2008

RECEIVED ON: 10/17/2008
COMPLETED ON: 10/20/2008

SUBMITTED BY:

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Houston, TX 77030
(713) 798-1273
[713] 798=1230 (fax)

SPECIMEN DESCRIPTION:
SPECIES: Human
DESCRIPTION: cells
NUMBER OF SPECIMENS: 1

PURCHASE ORDER #: 100895845

ID	ATCC #
hiPS#16p11	CRL-2097 CCD-1079Sk

PROFILE/EXAM REQUESTED: Cell Check

Marker Analysis
for Human Cell Lines

Marker Name	hiPS#16p11	
	Allele Size	Allele Sizes Expected #: CRL-2097
Amelogenin	X, Y	X, Y
CSF1PO	12, 13	12, 13
D13S317	11, 12	11, 12
D16S539	9, 11	9, 11
D5S818	11, 12	11, 12
D7S820	12	12
TH01	6, 9.3	6, 9.3
TPOX	10, 11	10, 11
vWA	17, 18	17, 18

Legend: NT = not tested because contamination was detected in the Species-specific PCR Evaluation.