The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Pluripotent Stem Cell Registry</u> > Eligibility Criteria for NIH Funding of Human Embryonic Stem Cell Research

Eligibility Criteria for NIH Funding of Human Embryonic Stem Cell Research

On August 9, 2001, at 9:00 p.m. EDT, the President announced his decision to allow Federal funds to be used for research on existing human embryonic stem cell lines as long as prior to his announcement (1) the derivation process (which commences with the removal of the inner cell mass from the blastocyst) had already been initiated and (2) the embryo from which the stem cell line was derived no longer had the possibility of development as a human being.

In addition, the President established the following criteria that must be met:

- The stem cells must have been derived from an embryo that was created for reproductive purposes;
- ▶ The embryo was no longer needed for these purposes;
- Informed consent must have been obtained for the donation of the embryo;
- No financial inducements were provided for donation of the embryo.

In order to facilitate research using human embryonic stem cells, the NIH created the Human Embryonic Stem Cell Registry, which lists the human embryonic stem cell lines—at varying stages of development—that meet the <u>eligibility criteria</u>. Listed below are entities that have developed stem cell lines that meet the President's criteria and are therefore eligible for federal funding. Please click on the name of the laboratory or company for contact information.

Name	Derivations	Available Lines
BresaGen, Inc., Athens, Georgia * The cells in line BG04/hESBGN-04 failed to expand into undifferentiated cell cultures.	4	3*
Cell & Gene Therapy Research Institute (Pochon CHA University), Seoul, Korea	2	
Cellartis AB, Göteborg, Sweden * Cell line SA03/Sahlgrenska 3 withdrawn by donor.	3	2*
CyThera, Inc., San Diego, California * The cells failed to expand into undifferentiated cell cultures.	9	0*
ES Cell International Pte Ld, Singapore	6	6
Geron Corporation, Menlo Park, California	7	
Göteborg University, Göteborg, Sweden	16	
Karolinska Institute, Stockholm, Sweden * The cells failed to expand into undifferentiated cell cultures.	6	0*
Maria Biotech Co. Ltd. – Maria Infertility Hospital Medical Institute, Seoul, Korea	3	

MizMedi Hospital—Seoul National University, Seoul, Korea * Cell line no longer eligible for federal funding.	1	0*
National Centre for Biological Sciences/Tata Institute of Fundamental Research, Bangalore, India	3	
Reliance Life Sciences, Mumbai, India	7	
Technion-Israel Institute of Technology, Haifa, Israel	4	3
University of California, San Francisco, California	2	2
Wisconsin Alumni Research Foundation, Madison, Wisconsin	5	5

Page citation: Eligibility Criteria for NIH Funding of Human Embryonic Stem Cell Research . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2008 [cited Tuesday, October 07, 2008] Available at http://stemcells.nih.gov/research/registry/eligibilitycriteria<>http://stemcells.nih.gov/research/registry/eligibilitycriteria







The National Institutes of Health resource for stem cell research

Home > Research Topics > NIH Human Pluripotent Stem Cell Registry > Cell Lines Currently Available for Shipping

Human Embryonic Stem Cell Lines Currently Available for Shipping

The NIH Human Embryonic Stem Cell Sources lists the derivations of stem cells that are eligible for federal funding. This list provides investigators with:

- a unique NIH Code for each cell line that must be used when applying for NIH funding and
- contact information to facilitate investigators' acquisition of stem cells.

Providers with Lines Available for Shipping

BresaGen, Inc.

Cell Lines

NIH Code: **BG01**, **BG02**, **BG03**, **BG04***

Provider's Code: hESBGN-01, hESBGN-02, hESBGN-03, hESBGN-

Number Shipped: 77

* The cells failed to expand into undifferentiated cell cultures.

BresaGen lines are available at reduced cost through the National Stem Cell Bank.

Contact BresaGen for more information about sublines. Subline BG01V is available for shipping. Contact ATCC for more information about BG01V.

▶ Table of Cell Characteristics

Contact Information

Allan Robins, Ph.D. Senior Vice President and Chief Scientific Officer BresaGen, Inc. 111 Riverbend Road Athens, GA 30605 Phone: 706-613-9878 x.158

Fax: 706-613-9879

E-mail: arobins@novocell.com

Memorandum of Understanding (27k PDF file; get Adobe Reader) BresaGen 2004 hESC Methods Manual, v2.1 (600k PDF file; get Adobe Reader)

Cellartis AB

Cell Lines

NIH Code: **SA01, SA02, SA03***

Provider's Code: Sahlgrenska 1, Sahlgrenska 2, Sahlgrenska 3*

Number Shipped: 13

* Cell line withdrawn by donor.

Cellartis may have sublines available for shipping. Contact Cellartis for more information about sublines.

► Table of Cell Characteristics

Contact Information

Mikael Englund, Ph.D. Phone: +44 (0) 1382 56 9972

E-mail: mikael.englund@cellartis.com

Johan Hyllner, Ph.D. Phone: +46 (0)31 758 0902

E-mail: johan.hyllner@cellartis.com

Cellartis AB

Arvid Wallgrens Backe 20 SE-413 46 Göteborg

Sweden

Fax: +46 (0)31 758 0910

Web site: http://www.cellartis.com

Memorandum of Understanding (59k

PDF file; get Adobe Reader)

ES Cell International

Cell Lines

NIH Code: ES01, ES02, ES03, ES04, ES05, ES06

Provider's Code: HES-1, HES-2, HES-3, HES-4, HES-5, HES-6

Number Shipped: 167

ESI lines are available at reduced cost through the <u>National Stem Cell</u> Bank.

ESI may have sublines available for shipping. Contact <u>ESI</u> for more information about sublines.

► Table of Cell Characteristics

Contact Information

Suresh Chandran, IP and Licensing

Manager

ES Cell International Pte Ltd

11 Biopolis Way # 05-06 Helios Singapore 138667 Phone: +65-6774-9570

Fax: +65-6774-5077

E-mail:

schandran@escellinternational.com

Web site:

http://www.escellinternational.com

Simple Letter of Agreement (30k PDF

file; get Adobe Reader)

National Stem Cell Bank

Cell Lines

Number Shipped: 724

The National Stem Cell Bank (NSCB) distributes eligible human embryonic stem cell lines at reduced cost.

Contact the National Stem Cell Bank for more information.

Contact Information

WiCell Research Institute

P.O. Box 7365

Madison, WI 53707-7365 Phone: 608-263-6297 Fax: 608-263-1064 E-mail: info@wicell.org

Web site:

http://www.nationalstemcellbank.org

Technion-Israel Institute of Technology

Cell Lines

NIH Code: **TE03**, **TE32***, **TE33***, **TE04**, **TE06**, **TE62***, **TE07***, **TE72***

Provider's Code: I 3, I 3.2*, I 3.3*, I 4, I 6, I 6.2*, J 3*, J 3.2*

Number Shipped: 95

Technion are available at reduced cost through the <u>National Stem Cell Bank</u>.

Technion may have sublines available for shipping. Contact <u>Technion</u> for more information about sublines.

* These lines are not yet available for shipping.

Contact Information

Dr. Joseph Itskovitz, M.D., D.Sc. Rambam Medical Center

Department of OB/GYN

POB 9602 Haifa 31096 Israel

Phone: 972-4-8542536 Fax: 972-4-8542503

rax: 9/2-4-6:

E-mail:

itskovitz@rambam.health.gov.il
Web site: http://www.technion.ac.il

Material Transfer Agreement (80K PDF file; get Adobe Reader)

▶ Table of Cell Characteristics

University of California, San Francisco

Cell Lines

NIH Code: UC01, UC06

Provider's Code: HSF-1, HSF-6

Number Shipped: 133

Contact Information

Dr. Linda C. Giudice, M.D., Ph.D. University of California, San Francisco Department of Obstetrics/Gynecology

& Reproductive Sciences
Box 0556, Room HSW 1656

UCSF lines are available at reduced cost through the National Stem Cell Bank.

UCSF may have sublines available for shipping. Contact <u>UCSF</u> for more information about sublines.

▶ Table of Cell Characteristics

San Francisco, CA 94143 Phone: 415-476-2564

Fax: 415-502-7866

E-mail: giudice@obgyn.ucsf.edu Web site: http://escells.ucsf.edu

Memorandum of Understanding (40k

PDF file; get Adobe Reader) Material Transfer Agreement

Wisconsin Alumni Research Foundation (WARF) (WiCell Research Institute)

Cell Lines

NIH Code: WA01, WA07, WA09, WA13, WA14

Provider's Code: H1, H7, H9, H13, H14

Number Shipped: 321

WiCell lines are available at reduced cost through the National Stem Cell Bank

WiCell also may have sublines available for shipping. Contact WiCell for more information.

▶ Table of Cell Characteristics

Contact Information

Tammy Torbleau

Secretary, Licensing Department Wisconsin Alumni Research

Foundation P.O. Box 7365

Madison, WI 53707-7365

Phone: 608-263-6297 Fax: 608-263-1064 E-mail: info@wicell.org

Web site: http://www.wicell.org

Memorandum of Understanding (22k

PDF file; get Adobe Reader)
Protocols & Work Flow
Technical Support FAQs

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2008 [cited Wednesday, October 08, 2008] Available at http://stemcells.nih.gov/research/registry/available>







The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Embryonic Stem Cell Registry</u> > BresaGen, Inc.

Provider: BresaGen, Inc.

	BresaGen, Inc.	Registered Cell Lin	es (United States)	
NIH Code	BG01	BG02	BG03	BG04*
Provider's Code	(hESBGN.01)	(hESBGN.02)	(hESBGN.03)	(hESBGN.04)*
Embryo				
Source	IVF Clinic	IVF Clinic	IVF Clinic	IVF Clinic
Category	Fresh	Fresh	Fresh	Fresh
IVF Status	Discarded—	Discarded—	Discarded—	Discarded—unacceptable
	unacceptable	unacceptable for	unacceptable for	for further use
	for further use	further use	further use	
Characteristics				
Passage #	> 70	> 40	> 35	< 5
Mouse Feeder Cells	Yes	Yes	Yes	Yes
Used in Isolation				
Karyotype	Normal	Normal	46XX	TBD
Stem Cell Immuno	+	+		
Markers:				
SSEA-1	-	-	-	-
SSEA-3	+	+	+	+
SSEA-4	+	+	+	+
TRA 1-60	+	+	+	TBD
TRA 1-81	+	+	+	TBD
Oct-4	+	+	+	TBD
Alkaline	+	+	+	+
Phosphatase				
Gender	Male	Male	Female	TBD
Frozen/Thawed:				
Short-term	Yes	Yes	Yes	Yes
Long-term	Yes	Yes	Yes	TBD
Pluripotent	Yes	Yes	Yes	TBD
Commercialization				
Available	43	16	25	No
				(The cells failed to
				expand into
				undifferentiated cell
				cultures.)
Price	\$5,000 + actual	\$5,000 + actual	\$5,000 + actual	NA
	shipping cost	shipping cost	shipping cost	
# Shipped	43	21	13	NA
Total			77	

TBD = To be Determined; NA = Not Applicable

This cell line meets the criteria for the use of human embryonic stem cells by federally funded researchers.

BresaGen, Inc. [Stem Cell Information] 09/11/2007 10:20 AM

* The cells failed to expand into undifferentiated cell cultures.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: BresaGen, Inc. . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Tuesday, September 11, 2007] Available at http://stemcells.nih.gov/research/registry/bresagen>







Cellartis AB [Stem Cell Information] 05/04/2007 03:58 PM

Stem Cell Information

The National Institutes of Health resource for stem cell research

Home > Research Topics > NIH Human Embryonic Stem Cell Registry > Provider: Cellartis AB

Provider: Cellartis AB

	Cellartis AB Registered	Cell Lines (Sweden)	
NIH Code	SA01	SA02	SA03*
Provider's Code	(Sahlgrenska 1)	(Sahlgrenska 2)	(Sahlgrenska 3)*
Embryo	(cumstendin 1)	(cumstonom =)	(ouristoniu o)
Source	IVF Clinic	IVF Clinic	IVF Clinic
Category	Frozen	Frozen	Frozen
IVF Status	Surplus, to be discarded	Surplus, to be discarded	Surplus, to be discarded
Characteristics	,	,	1 /
Passage #	Passage 13 (LOT AK001, > 100 vials available)	Passage 12 (LOT AL002, > 100 vials available)	Donation withdrawn
Mouse Feeder Cells	Yes	Yes	
Used in Isolation			
Karyotype	46, XY	47, XX +13	
Stem Cell Immuno Markers:			
SSEA-1	-	-	
SSEA-3	+	+	
SSEA-4	+	+	
TRA 1-60	+	+	
TRA 1-81	+	+	
Oct-4	+	+	
Alkaline Phosphatase	+	+	
Gender	Male	Female	
Frozen/Thawed:	Yes	Yes	
Short-term	Yes	Yes	
Long-term	Yes	Yes	
Pluripotent	Yes	Yes	
Commercialization			
# Shipped	5	8	NA
Total		13	

TBD = To be Determined; NA = Not Applicable

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: Provider: Cellartis AB. In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human

^{*} Cell line withdrawn by donor.

Cellartis AB [Stem Cell Information] 05/04/2007 03:58 PM

Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/cellartis







The National Institutes of Health resource for stem cell research

Home > Research Topics > NIH Human Embryonic Stem Cell Registry > Provider: ES Cell International

Provider: ES Cell International

ES Cell International Registered Cell Lines									
NIH Code	ES01	ES02	ES03	ES04	ES05	ES06			
Provider's Code	(HES-1)	(HES-2)	(HES-3)	(HES-4)	(HES-5)	(HES-6)			
Embryo	,		,	,	,	,			
Source	IVF Clinic								
Category	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen			
IVF Status	Surplus, to be discarded								
Characteristics	discarded	discarded	discarded	discarded	discarded	discarded			
Passage #	TBD	TBD	TBD	TBD	TBD	TBD			
Mouse Feeder Cells Used in Isolation	Yes	Yes	Yes	Yes	Yes	Yes			
Karyotype	46XX	46XX	46XX	46XY	46XY	46XX			
Stem Cell Immuno Markers:	10222	102121	102121	1021	1021	102121			
SSEA-1	_	-	-	-	_	NA			
SSEA-3	+	+	+	+	+	+			
SSEA-4	+	NA	+	+	+	NA			
TRA 1-60	+	+	+	+	+	+			
TRA 1-81	+	+	+	+	+	+			
Oct-4	+	+	+	+	+	+			
Alkaline Phosphatase	+	+	+	+	+	+			
Gender	Female	Female	Female	Male	Male	Female			
Frozen/Thawed:									
Short-Term	Yes	Yes	Yes	Yes	Yes	Yes			
Long-Term	Yes	Yes	Yes	Yes	Yes	Yes			
Pluripotent	ecto- endo- meso-	ecto- endo- meso-	ecto- endo- meso-	ecto- endo- meso-	ecto- endo- meso-	ecto- endo- meso-			
Commercialization									
Available	> 100	> 100	> 100	> 100	> 100	> 100			
Price	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000			
# Shipped Total Shipped	6	32	59	57 67	3	10			

TBD = To be Determined; NA = Not Applicable

This cell line meets the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: Provider: ES Cell International . In *Stem Cell Information* [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Tuesday, September 11, 2007] Available at http://stemcells.nih.gov/research/registry/esi







The National Institutes of Health resource for stem cell research

Home > Research Topics > NIH Human Embryonic Stem Cell Registry > Technion-Israel Institute of Technology

Provider: Technion-Israel Institute of Technology

Technion-Israel Institute of Technology Registered Cell Lines (Israel)										
NIH Code	TE03	TE32*	TE33*	TE04	TE06	TE62*	TE07*	TE72*		
Provider's Code	(I 3)	(I 3.2)*	(I 3.3)*	(I 4)	(I 6)	(I 6.2)*	(J 3)*	(J 3.2)*		
Embryo	, ,			` ,	, ,					
Source	IVF Clinic	IVF	IVF	IVF Clinic	IVF Clinic	IVF	IVF	IVF		
		Clinic	Clinic			Clinic	Clinic	Clinic		
Category	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	Fresh	Frozen		
	embryo	embryo	embryo	embryo	embryo	embryo	embryo	embryo		
IVF Status	Surplus, to	Surplus,	Surplus,	Surplus, to	Surplus, to	Surplus,	Surplus,	Surplus,		
	be	to be	to be	be	be	to be	to be	to be		
	discarded	discarded	discarded	discarded	discarded	discarded	discarded	discarded		
Characteristics										
Passage #	20-30	TBD	TBD	25-35	20-30	TBD	NP	TBD		
Mouse Feeder Cells	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Used in Isolation										
Karyotype	46,XX	TBD	TBD	46,XX	46,XY	TBD	46,XY	TBD		
Stem Cell Immuno										
Markers:										
SSEA-1	-	TBD	TBD	-	-	TBD	-	TBD		
SSEA-3	-/+	TBD	TBD	-/+	-/+	TBD	-/+	TBD		
SSEA-4	+	TBD	TBD	+	+	TBD	+	TBD		
TRA 1-60	+	TBD	TBD	+	+	TBD	+	TBD		
TRA 1-81	+	TBD	TBD	+	+	TBD	+	TBD		
Oct-4	+	TBD	TBD	+	+	TBD	+	TBD		
Alkaline	+	TBD	TBD	+	+	TBD	TBD	TBD		
Phosphatase										
Gender	Female	TBD	TBD	Female	Male	TBD	Male	TBD		
Frozen/Thawed:		TBD	TBD			TBD		TBD		
Short-Term	Yes			Yes	Yes		Yes			
Long-Term	Yes			Yes	Yes		Yes			
Pluripotent in vitro	Yes	TBD	TBD	Yes	Yes	TBD	Yes	TBD		
(EBs)										
Pluripotent in vitro	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
(teratomas)										
Commercialization	Yes,	NA	NA	Yes,	Yes,	NA	NA	NA		
	NOGA			NOGA	NOGA					
	dated			dated	dated					
	9/05/2003			9/05/2003	9/05/2003					
Available	30	NA	NA	30	30	NA	NP	NA		
Price	\$2,500 +	NA	NA	\$2,500 +	\$2,500 +	NA	NP	NA		
	shipping			shipping	shipping					
# Shipped	44	NA	NA	3	48	NA	NP	NA		
Total				93	5					

TBD = To be Determined; NA = Not Applicable; NP = Not Provided

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

^{*} These lines are not yet available for shipping.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: Technion-Israel Institute of Technology. In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/technion







The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Embryonic Stem Cell Registry</u> > University of California at San Francisco

Provider: University of California, San Francisco

University of California, San Francisco Registered Cell Lines (United States)							
NIH Code	UC01	UC06					
Provider's Code	(HSF-1)	(HSF-6)					
Embryo							
Source	IVF Clinic	IVF Clinic					
Category	Fresh	Fresh					
IVF Status	Surplus, to be discarded	Surplus, to be discarded					
Characteristics							
Passage #	TBD	TBD					
Mouse Feeder Cells	Yes	Yes					
Used in Isolation							
Karyotype	46XY	46XX					
Stem Cell Immuno Markers:							
SSEA-1	-	-					
SSEA-3	+	+					
SSEA-4	+	+					
TRA 1-60	+	+					
TRA 1-81	+	+					
Oct-4	+	+					
Alkaline	+	+					
Phosphatase							
Gender	Male	Female					
Frozen/Thawed:							
Short-Term	Yes	Yes					
Long-Term	Yes	Yes					
Pluripotent	Yes	Yes					
Commercialization							
Available	45	36					
Price	\$5,000	\$5,000					
# Shipped	17 (since July 2004)	70 (since July 2004)					
Total	1.	33					

TBD = To be Determined; NA = Not Applicable

This cell line meets the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: University of California at San Francisco. In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/ucsf<>a href="http://stemcells.nih.gov/research/registry/ucsf">http://stemcells.nih.gov/research/registry/ucsf







05/04/2007 03:59 PM

Stem Cell Information

The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Embryonic Stem Cell Registry</u> > Wisconsin Alumni Research Foundation (WiCell Research Institute)

Provider: Wisconsin Alumni Research Foundation (WiCell Research Institute)

Wina	onoin Alumni Do	saarah Farmdatio	on (WiCall Page)	rob Instituto)						
Wisc	Wisconsin Alumni Research Foundation (WiCell Research Institute) Registered Cell Lines (United States)									
NIH Code	WA01	WA07	WA09	WA13	WA14					
Provider's Code	(H1)	(H7)	(H9)	(H13)	(H14)					
Embryo										
Source	IVF Clinic	IVF Clinic	IVF Clinic	IVF Clinic	IVF Clinic					
Category	NA	NA	NA	NA	NA					
IVF Status	Surplus, to be discarded	Surplus, to be discarded	Surplus, to be discarded	Surplus, to be discarded	Surplus, to be discarded					
Characteristics										
Passage #	20–24	20–24	20–24	Not provided	20–24					
Mouse Feeder Cells Used in Isolation	Yes	Yes	Yes	Yes	Yes					
Karyotype	46XY	46XX	46XX	46XY	46XY					
Stem Cell Immuno Markers:										
SSEA-1	-	<u>-</u>	-	-	-					
SSEA-3	+	+	+	+	+					
SSEA-4	+	+	+	+	+					
TRA 1-60	+	+	+	+	+					
TRA 1-81	+	+	+	+	+					
Oct-4	+	+	+	+	+					
Alkaline Phosphatase	+	+	+	+	+					
Gender	Male	Female	Female	Male	Male					
Frozen/Thawed:										
Short-term	Yes	Yes	Yes	Yes	Yes					
Long-term	Yes	Yes	Yes	Yes	Yes					
Pluripotent	Yes	Yes	Yes	Yes	Yes					
Commercialization										
Available	520	175	600	200	250					
Price:										
In U.S.	\$500	\$500	\$500	\$500	\$500					
Outside U.S.	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500					
# Shipped	191	21	96	5	8					
Total			321							

TBD = To be Determined; NA = Not Applicable

This cell line meets the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: Wisconsin Alumni Research Foundation (WiCell Research Institute) . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/warf







The National Institutes of Health resource for stem cell research

<u>Home > Research Topics > NIH Human Pluripotent Stem Cell Registry > Cell Lines Not Yet Available for Shipping</u>

Human Embryonic Stem Cell Lines Not Currently Available for Shipping

The NIH Human Embryonic Stem Cell Sources lists the <u>derivations of stem cells that are eligible for federal funding</u>. The purpose of the Registry is to provide investigators with:

- a unique NIH Code for each cell line that must be used when applying for NIH funding and
- contact information to facilitate investigators' acquisition of stem cells.

Providers with No Lines Available for Shipping

Cell & Gene Therapy Research Institute (Pochon CHA University)

Cell Lines

NIH Code: CH01*, CH02*

Provider's Code: CHA-hES-1*, CHA-hES-2*

* These lines are not available for shipping.

Cell characteristics not available from provider.

Contact Information

Hyung Min Chung, Ph.D. Director, Cell & Gene Therapy Research Institute Pochon CHA University College of Medicine

605 Yeoksam 1-dong, Kangnam-gu

Seoul 135-081

Korea

Tel: (82) 2 3468 3391 Fax: (82) 2 3468 3393 Cell: (82) 17 208 1926

E-mail: hmchung@chacares.com

CyThera, Inc.

Cell Lines

NIH Code: CY12*, CY30*, CY40*, CY51*, CY81*, CY82*, CY91*, CY92*, CY10*

Provider's Code: hES-1-2*, hES-3-0*, hES-4-0*, hES-5-1*, hES-8-1*, hES-8-2*, hES-9-1*, hES-9-2*, hES-101*

Table of Cell Characteristics

Contact Information

CyThera, Inc.

3550 General Atomics Court #02-503

San Diego, CA 92121 Phone: 858-455-3708 Fax: 858-455-3962

Geron Corporation

Cell Lines

NIH Code: GE01*, GE07*, GE09*, GE13*, GE14*, GE91*, GE92*

Provider's Code: H1*, H7*, H9*, H13*, H14*, H9.1*, H9.2*

* These lines are not available for shipping.

Contact Information

Stem Cell Request 230 Constitution Drive Menlo Park, CA 94025 Phone: 650-473-7216 Fax: 650-473-7750

E-mail: esrequest@geron.com

^{*} The cells failed to expand into undifferentiated cell cultures.

▶ Table of Cell Characteristics

Web site: http://www.geron.com

Göteborg University

Cell Lines

NIH Code: SA04-SA19*

Provider's Code: Sahlgrenska 4-Sahlgrenska 19*

* These lines are not available for shipping.

▶ Table of Cell Characteristics

Contact Information

Professor Peter S. Eriksson Arvid Carlsson Institute

Sahlgrenska Academy at Göteborg University

Sahlgrenska University Hospital

413 45 Göteborg

Sweden

Phone: 46-31-3424348 Mobile: 46-708-593592 Fax: 46-31-3422437

Karolinska Institute

Cell Lines

NIH Code: KA08*, KA09*, KA40*, KA41*, KA42*, KA43*

Provider's Code: hICM8*, hICM9*, hICM40*, hICM41*, hICM42*, hICM43*

* The cells failed to expand into undifferentiated cell cultures.

Contact Information

Dr. Lars Ahrlund-Richter

Huddinge University Hospital, Novum

SE-141 86 Stockholm

Sweden

Phone: 46 9 5858 3848 Fax: 46 8 5858 3870

► Table of Cell Characteristics

Maria Biotech Co. Ltd.—Maria Infertility Hospital Medical Institute

Cell Lines

NIH Code: MB01*, MB02*, MB03*

Provider's Code: MB01*, MB02*, MB03*

- * These lines are not available for shipping.
- **▶** Table of Cell Characteristics

Contact Information

Jin Ho Lim, President Maria Biotech Co.

103-11, Shinseol-Dong, Dongdaemun-Gu

Seoul 130-812

Korea

Phone: (82) 2 2250-5580 Fax: (82) 2 2250-5585 E-mail: lim@mariababy.com

MizMedi Hospital—Seoul National University

Cell Lines

NIH Code: MI01*

Provider's Code: Miz-hES1*

* Cell line no longer eligible for federal funding.

▶ Table of Cell Characteristics

Contact Information

Sung-il Roh, M.D.

Supervisor

Medical Research Center, MizMedi Hospital

701-4, Naebalsan-dong, Kangseo-ku

Seoul, Korea

Phone: +82-2-2007-1201 Fax: +82-2-2007-1285 E-mail: roh@mizmedi.net

Web site:

http://www.mizmedi.com/center/mrclab.asp

Material Transfer Agreement (28k PDF file; get Adobe Reader)

National Centre for Biological Sciences/Tata Institute of Fundamental Research

Cell Lines

NIH Code: NC01*, NC02*, NC03*

Provider's Code: FCNCBS1*, FCNCBS2*, FCNCBS3*

* These lines are not available for shipping.

▶ Table of Cell Characteristics

Contact Information

Dr. Mitradas M. Panicker University of Agricultural Sciences **GKVK Campus** GKVK P.O., Bellary Road Bangalore, 560065

India

Phone: 91-80-363-6420 Fax: 91-80-363-6662 E-mail: panic@ncbs.res.in

Reliance Life Sciences

Cell Lines

NIH Code: RL05*, RL07*, RL10*, RL13*, RL15*, RL20*, **RL21***

Provider's Code: RLS ES 05*, RLS ES 07*, RLS ES 10*, RLS ES 13*, RLS ES 15*, RLS ES 20*, RLS ES 21*

* These lines are not available for shipping.

Contact Information

Dr. K.V. Subramaniam Maker Chambers IV Naariman Point Mumbai 4000021 India

E-mail: K v subramaniam@ril.com Web site: http://www.ril.com

Cell characteristics not available from provider.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail <u>stemcell@mail.nih.gov</u>.

Page citation: Cell Lines Not Currently Available for Shipping. In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department







CyThera, Inc. [Stem Cell Information] 05/04/2007 04:00 PM

Stem Cell Information

The National Institutes of Health resource for stem cell research

Home > Research Topics > NIH Human Embryonic Stem Cell Registry > Cell Lines Not Yet Available for Shipping CyThera, Inc.

Provider: CyThera, Inc.

Note: The cells failed to expand into undifferentiated cell cultures.

		CyTher	a, Inc. Regis	tered Cell Li	nes (United	States)			
NIH Code	CY12	CY30	CY40	CY51	CY81	CY82	CY91	CY92	CY10
Provider's Code	(hES-1-	(hES-3-	(hES-4-	(hES-5-	(hES-8-	(hES-8-	(hES-9-	(hES-9-	(hES-
r iovidei s Code	2)	0)	0)	1)	1)	2)	1)	2)	101)
Embryo									
Source	IVF	IVF	IVF	IVF	IVF	IVF	IVF	IVF	IVF
	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic	Clinic
Category	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen	Frozen
	embryo	embryo	embryo	embryo	embryo	embryo	embryo	embryo	embryo
IVF Status	Surplus,	Surplus,	Surplus,	Surplus,	Surplus,	Surplus,	Surplus,	Surplus,	Surplus,
	to be	to be	to be	to be	to be	to be	to be	to be	to be
_	discarded	discarded	discarded	discarded	discarded	discarded	discarded	discarded	discarded
Characteristics	_	_		_		_	_	_	_
Passage #	2	3	4	5	4	3	5	2	2
Mouse Feeder Cells Used in Isolation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Karyotype	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Stem Cell Immuno									
Markers:									
SSEA-1	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
SSEA-3	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
SSEA-4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
TRA 1-60	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
TRA 1-81	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Oct-4	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Alkaline	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Phosphatase									
Gender	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Frozen/Thawed:	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Short-Term									
Long-Term									
Pluripotent	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Commercialization	NA	NA	NA	NA	NA	NA	NA	NA	NA

TBD = To be Determined; NA = Not Applicable

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: CyThera, Inc. . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday,



National Institutes of Health (NIH)



Department of Health



CyThera, Inc. [Stem Cell Information] 05/04/2007 04:00 PM







The National Institutes of Health resource for stem cell research

<u>Home > Research Topics > NIH Human Embryonic Stem Cell Registry > Cell Lines Not Yet Available for Shipping > Geron Corporation</u>

Provider: Geron Corporation

Note: These lines are not yet available for shipping.

Geron Corporation Registered Cell Lines (United States)								
NIH Code	GE01	GE07	GE09	GE13	GE91 (clone)	GE92 (clone)		
Provider's	(WiCell	(WiCell	(WiCell	(WiCell	(WiCell H9.1)	(WiCell H9.2)		
Code	H1)	H7)	H9)	H13)				

Geron responses to the NIH's request for information on cell characteristics, 6/12/2003

All of the embryonic stem cell lines in Geron's possession that are on the NIH Stem Cell Registry were derived elsewhere. Five of them were derived at the University of Wisconsin-Madison; two are clones of one of the Wisconsin lines; and two others were derived at the University of California, San Francisco. Under Geron's agreement with Wisconsin Alumni Research Foundation, we are not permitted to transfer the undifferentiated Wisconsin cell lines to third parties, except for Geron collaborators for work on projects described and directed by Geron. WiCell Research Institute does distribute the Wisconsin lines to researchers, however, and UCSF distributes the UCSF lines.

As to your specific questions: None of the lines is a frozen inner cell mass; they are all cell lines. They are all proliferating.

- ▶ The H1, H7 and H9 lines have been extensively characterized. We have recently submitted manuscripts on the detailed characterization of these three lines. We can provide you a copy of the manuscripts in confidence, or send them to you once they have been published. The lines have the expected markers to show undifferentiated status, and we have demonstrated differentiation in all three germ layers for all 3 of the lines.
- The H1, H7 and H9 lines have been passaged extensively. In most cases, over 70 passages have been achieved.
- ▶ The lines are all useful for research. Two of the lines, H1 and H7, have been tested quite extensively for the presence of potential pathogens of human and animal original, based on the specified by FDA in its Points to Consider and other guidance.

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov or call 301-402-2313.

Page citation: Geron Corporation . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/unavailable/geron





The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Embryonic Stem Cell Registry</u> > <u>Cell Lines Not Yet Available</u> <u>for Shipping</u> > Göteborg University

Provider: Göteborg University

Note: These lines are not yet available for shipping.

Göteborg University Regi	stered Cell Lines (Sweden)
NIH Code	SA04-SA19
Provider's Code	(Sahlgrenska 4–Sahlgrenska 19)
Embryo	
Source	IVF Clinic
Category	Frozen
IVF Status	Surplus, to be discarded
Characteristics	
Passage #	2–3
Mouse Feeder Cells	No
Used in Isolation	
Karyotype	TBD
Stem Cell Immuno Markers:	
SSEA-1	TBD
SSEA-3	TBD
SSEA-4	TBD
TRA 1-60	TBD
TRA 1-81	TBD
Oct-4	TBD
Alkaline	TBD
Phosphatase	
Gender	TBD
Frozen/Thawed:	TBD
Short-term	
Long-term	
Pluripotent	TBD
Commercialization	NA

TBD = To be Determined; NA = Not Applicable

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: Göteborg University . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/unavailable/goteborg







The National Institutes of Health resource for stem cell research

<u>Home > Research Topics > NIH Human Embryonic Stem Cell Registry > Cell Lines Not Yet Available for Shipping > Karolinska Institute</u>

Provider: Karolinska Institute

Note: The cells failed to expand into undifferentiated cell cultures.

Karolinska Institute Registered Cell Lines (Sweden)									
NIH Code	KA08	KA09	KA40	KA41	KA42	KA43			
Provider's Code	(hICM8)	(hICM9)	(hICM40)	(hICM41)	(hICM42)	(hICM43)			
Embryo									
Source	IVF Clinic								
Category	Fresh	Fresh	Fresh	Fresh	Fresh	Fresh			
IVF Status	Surplus, to be discarded								
Characteristics									
Passage #	Frozen, awaiting characterization	Frozen, awaiting characterization	Frozen, awaiting characterization	Frozen, awaiting characterization	Frozen, awaiting characterization	Frozen, awaiting characterization			
Mouse Feeder Cells Used in Isolation	Yes	Yes	No	No	No	No			
Karyotype	TBD	TBD	TBD	TBD	TBD	TBD			
Stem Cell Immuno Markers:			TBD	TBD	TBD	TBD			
SSEA-1	TBD	Weak							
SSEA-3	TBD	TBD							
SSEA-4	TBD	++							
TRA 1-60	TBD	TBD							
TRA 1-81	TBD	TBD							
Oct-4	TBD	TBD							
Alkaline Phosphatase	+	+							
Gender	TBD	TBD	TBD	TBD	TBD	TBD			
Frozen/Thawed:	TBD	TBD	TBD	TBD	TBD	TBD			
Short-term	3 weeks	3 weeks							
Long-term	3 months	3 months							
Pluripotent Commercialization	TBD NA	TBD NA	TBD NA	TBD NA	TBD NA	TBD NA			

TBD = To be Determined; NA = Not Applicable

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: Karolinska Institute . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/unavailable/karolinska>





The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Embryonic Stem Cell Registry</u> > <u>Cell Lines Not Yet Available</u> <u>for Shipping</u> > Maria Biotech Co. Ltd.—Maria Infertility Hospital Medical Institute

Provider: Maria Biotech Co. Ltd.—Maria Infertility Hospital Medical Institute

Note: These lines are not yet available for shipping.

Maria Biotech Co. Lt	td.—Maria Infertility Hospita	al Medical Institute Register	red Cell Lines (Korea)
NIH Code	MB01	MB02	MB03
Provider's Code	(MB01)	(MB02)	(MB03)
Embryo			
Source	IVF Clinic	IVF Clinic	IVF Clinic
Category	Cryopreservation	Cryopreservation (27	Cryopreservation (27
		passages)	passages)
		In vitro (>30 passages)	In vitro (>50 passages)
IVF Status	Were to be discarded 5	Were to be discarded 5	Were to be discarded 5
	years after IVF-ET	years after IVF-ET	years after IVF-ET
	program	program	program
Characteristics			
Passage #	40	>30	>50
Mouse Feeder Cells Used in Isolation	STO cell feeder (After immunosurgery, isolated ICM cell was cocultured with mouse STO cell and hES cell line was established)	STO cell—feeder free (After immunosurgery, isolated ICM cells were cocultured with mouse STO cell. To grow hES cells without a feeder layer, aged MB02 and MB03 cells that had been passaged 10 times were cultured on Matrigel coated plates, respectively.)	STO cell—feeder free (After immunosurgery, isolated ICM cells were cocultured with mouse STO cell. To grow hES cells without a feeder layer, aged MB02 and MB03 cells that had been passaged 10 times were cultured on Matrigel coated plates, respectively.)
Karyotype	46 XY, Normal	46, XX, Normal	46, XX, Normal
Stem Cell Immuno			
Markers:			
SSEA-1	-	-	-
SSEA-3	+	+	+
SSEA-4	+	+	+
TRA 1-60	+	+	+
TRA 1-81	+	+	+
Oct-4	+	+	+
Alkaline Phosphatase	+	+	+
Gender	Male	Female	Female
Frozen/Thawed:	40 passages frozen	27 passages frozen >30 passages cultured	>50 passages in vitro culture

Pluripotent	Yes	Yes	Yes
Commercialization			
Available	To scientists in Korea	To scientists in Korea	To scientists in Korea
Price	Unknown	Unknown	Unknown
# Shipped	Unknown	Unknown	Unknown

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: Maria Biotech Co. Ltd.—Maria Infertility Hospital Medical Institute. In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/unavailable/maria







The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Embryonic Stem Cell Registry</u> > <u>Cell Lines Not Yet Available</u> <u>for Shipping</u> > MizMedi Hospital—Seoul National University

Provider: MizMedi Hospital—Seoul National University

Cell line no longer eligible for federal funding.

MizMedi Hospital—Seoul Natio	onal University Registered Cell Lines (Korea)
NIH Code	MI01*
Provider's Code	(Miz-hES1)*
Embryo	
Patient's Consent	Yes
IRB Approvals	Yes
Source	IVF Clinic
Category	Frozen embryo
IVF Status	Surplus, to be discarded
Characteristics	
Passages	125
Teratoma Foundation	Three germ layer
Embryoid Body	Three germ layer
DNA Fingerprinting	TBD
Karyotype	Normal 46 XY
Stem Cell Immuno Markers:	
SSEA-1	-
SSEA-3	Partially +
SSEA-4	+
TRA 1-60	+
TRA 1-81	+
Oct-4	+
Alkaline	+
Phosphatase	
Gender	Male
Frozen/Thawed:	
Short-Term	Yes
Long-Term	Yes
Pluripotent	Yes
Commercialization	
Available	1,000
Price	\$5,000
# Shipped	39

TBD = To be Determined

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

^{*} Cell line no longer eligible for federal funding.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: MizMedi Hospital—Seoul National University . In Stem Cell Information [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at http://stemcells.nih.gov/research/registry/unavailable/mizmedi







The National Institutes of Health resource for stem cell research

<u>Home</u> > <u>Research Topics</u> > <u>NIH Human Embryonic Stem Cell Registry</u> > <u>Cell Lines Not Yet Available</u> <u>for Shipping</u> > National Centre for Biological Sciences/Tata Institute of Fundamental Research

Provider: National Centre for Biological Sciences/Tata Institute of Fundamental Research

Note: These lines are not yet available for shipping.

National Centre for Biological Sciences/Tata Institute of Fundamental Research (India)					
NIH Code	NC01	NC02	NC03		
Provider's Code	(FCNCBS1)	(FCNCBS2)	(FCNCBS3)		

NCBS responses to the NIH's request for information on cell characteristics

- 1. What is the status of each of your embryonic stem cell derivation listed on the NIH Embryonic Stem Cell Registry?
 - ▶ Is it a frozen inner cell mass?

Yes

▶ Is it proliferating?

It was frozen after 7 days in culture. We have not characterised them. We are obtaining experience in generating new cell lines and will thaw these when we decide we have sufficient data and experience.

Has it undergone any characterization? If so, are there markers identified to show undifferentiated status? Is their evidence the cells can differentiate into any of the three germ layers (ectoderm, mesoderm, endoderm)?

No evidence for that—see above.

▶ If the lines are proliferating, how many passages have been achieved?

See above.

2. Have these derivations been shipped to any NIH-funded researchers?

No

3. If the derivation has not been shipped, are there any plans to develop this derivation to research quality?

Yes, we hope to develop these and other lines.

4. When will they be readily available to NIH researchers?

I hope that once they are derived and characterized they would be available to the academic community.

5. Have any restrictions been placed on the use of these derivation by your national laws?

The guidelines that are being discussed at this point suggest that cells may not be shipped outside of India. My understanding is that this may be allowed in the future only on approval by a National Committee on a case by case basis for research purposes.

These cell lines meet the criteria for the use of human embryonic stem cells by federally funded researchers.

* These lines are not yet available for shipping.

In your grant applications please use the NIH codes, rather than the providers' codes, to identify the cell lines.

Information about the cell line comes from the provider and has not been independently verified by the NIH.

For any questions about the registry, please e-mail stemcell@mail.nih.gov.

Page citation: National Centre for Biological Sciences/Tata Institute of Fundamental Research . In *Stem Cell Information* [World Wide Web site]. Bethesda, MD: National Institutes of Health, U.S. Department of Health and Human Services, 2007 [cited Friday, May 04, 2007] Available at https://stemcells.nih.gov/research/registry/unavailable/ncbs





