THE UNIVERSITY OF WESTERN ONTARIO
BIOLOGICAL AGENTS REGISTRY FORM
Approved Biohazards Subcommittee: October 14, 2010
Biosafety Website: www.uwo.ca/humanresources/biosafety/

This form must be completed by each Principal Investigator holding a grant administered by the University Of Western Ontario (UWO) or in charge of a laboratory/facility where the use of Level 1, 2 or 3 biological agents is described in the laboratory or animal work proposed. The form must also be completed if any work is proposed involving animals carrying zoonotic agents infectious to humans or involving plants, fungi, or insects that require Public Health Agency of Canada (PHAC) or Canadian Food Inspection Agency (CFIA) permits.

This form must be updated at least every 3 years or when there are changes to the biological agents being used.

Containment Levels will be established in accordance with Laboratory Biosafety Guidelines, 3rd edition, 2004, Public Health Agency of Canada (PHAC) or Containment Standards for Veterinary Facilities, 1st edition 1996, Canadian Food Inspection Agency (CFIA).

Completed forms are to be returned to Occupational Health and Safety, (OHS), (Support Services Building, Room 4190) for distribution to the Biohazards Subcommittee. For questions regarding this form, please contact the Biosafety Officer at extension 81135 or biosafety@uwo.ca. If there are changes to the information on this form (excluding grant title and funding agencies), contact Occupational Health and Safety for a modification form. See website: www.uwo.ca/humanresources/biosafety

PRINCIPAL INVESTIGATOR	Dr. Eva Turley
DEPARTMENT	Oncology, Cancer Research lab, LRCP
ADDRESS	790 Commissioners Rd. E. Room A4-931
PHONE NUMBER	519-685-8500 Ex. 53677 Lab Ex.53280
EMERGENCY PHONE NUMBER(S)	519-685-8500 Ex. 53280
EMAIL	Eva.Turley@lhsc.on.ca

Location of experimental work to be carried out: Building(s) LRCP building A Room(s)_A4-931, A4928, A4-824

*For work being performed at Institutions affiliated with the University of Western Ontario, the Safety Officer for the Institution where experiments will take place must sign the form prior to its being sent to the University of Western Ontario Biosafety Officer (See Section 15.0, Approvals).

FUNDING AGENCY/AGENCIES: CBCF, NSERC, MITACS (Octoderma)

GRANT TITLE(S):
1. RHAMM / HMMR in Breast and Prostate Cancer progression
2. The role of RHAMM in wound repair.
3. Unconventional export and trafficking of RHAMM

List all personnel working under Principal Investigators supervision in this location:

Name	UWO E-mail Address	Date of Biosafety Training
Jenny Ma	Jenny.Ma@lhsc.on.ca	Jun 23, 2011
Conny Toelg	Conny.Toelg@lhsc.on.ca	Jun 24, 2011
Natalia Akentieva	Natalia.Akentieve@lhsc.on.ca	Jun 23, 2011
Pat Telmer	Patrick.Telmer@lhsc.on.ca	Jun 24, 2011
Siddika Pardhan	spardha@uwo.ca	Jun 23, 2011

Please explain the biological agents and/or biohazardous substances used and how they will be stored, used and disposed of. Projects without this description will not be reviewed.

1. We use *E.coli* strain K12 bacteria for propagation of protein expression plasmids and for producing recombinant RHAMM proteins. We use these proteins as reagents for producing polyclonal antibodies, as function blockers of cell invasion/migration and proliferation in culture and *in vivo*, for characterizing binding characteristics *in vitro* and for screening peptide mimetic/small chemical libraries to identify Rhamm function blocking reagents.
   All reagents for bacterial work are stored in labeled areas of the laboratory and cold room. Liquid bacterial cultures are sterilized with bleach overnight before disposing. All bacterial plates and contaminated pipettes are disposed of in Biohazardous waste containers in strict accordance with London Health Sciences hazardous waste policies.

2. We use human cell lines including fibroblast, breast cancer, prostate cancer, and melanoma obtained from ATCC for in culture and *in vivo* (immune compromised mice) experiments.
   All cell culture reagents are disposed of Biohazardous waste containers in strict accordance with London Health Sciences hazardous waste policies. Liquid Media is decontaminated with bleach overnight before disposal. Frozen cell lines are kept in -80, -150 freezers or liquid nitrogen tank that are clearly labeled.

3. We have several varieties of rodent cells which we use to assess the function and localization of Rhamm and to characterize the effects of blocking Rhamm function on cell migration/proliferation. We use murine fibroblast lines obtained from ATCC along with primary cultures which are prepared by our lab. The primary cultures are muring embryonic fibroblasts, dermal fibroblasts, wound site fibroblasts, and bone marrow fibroblasts (stem cells). These are grown from explanted tissue and maintained in culture for approximately 8 passages. We obtain these primary cells from wildtype BL6 mice, Rhamm -/- BL6 mice, CD44-/- BL6 mice, and Rhamm-/-;CD44-/- BL6 mice.
   All cell culture reagents are disposed of Biohazardous waste containers in strict accordance with London Health Sciences hazardous waste policies. Liquid Media is decontaminated with bleach overnight before disposal.

New Info

Please include a one page research summary or teaching protocol.

My research program currently focuses upon defining the mechanisms by which the polysaccharide hyaluronan controls wound repair and the related process of tumour progression. Hyaluronan is a large negatively charged glycosaminoglycan produced by hyaluronan synthases. It functions both to organize the pericellular matrix and to activate signaling cascades that control cell migration and cell division. My laboratory identified, characterized and cloned the first cellular hyaluronan receptor, termed Rhamm (gene name HMMR). We are investigating the mechanisms by which this intracellular and extracellular protein controls wound repair, mesenchymal stem cell trafficking and breast/prostate cancer progression.

1.0 Microorganisms

1.1 Does your work involve the use of biological agents? xO YES O NO
(non-pathogenic and pathogenic biological agents including but not limited to bacteria and other microorganisms, viruses, prions, parasites or pathogens of plant or animal origin)? If no, please proceed to Section 2.0

Do you use microorganisms that require a permit from the CFIA? O YES xO NO
If YES, please give the name of the species. _____
What is the origin of the microorganism(s)? _____
Please describe the risk (if any) of escape and how this will be mitigated:

Please attach the CFIA permit.
Please describe any CFIA permit conditions:

1.2 Please complete the table below:

Name of Biological Agent(s)* (Be specific)	Is it known to be a human pathogen? YES/NO	Is it known to be an animal pathogen? YES/NO	Is it known to be a zoonotic agent? YES/NO	Maximum quantity to be cultured at one time? (in Litres)	Source/ Supplier	PHAC or CFIA Containment Level
E.Coli	xO Yes O No	Ox Yes O No	Ox Yes O No	0.5L@0.70D frozen stock		xO 1 O 2 O 2+ O 3
	O Yes O No	O Yes O No	O Yes O No			O 1 O 2 O 2+ O 3
	O Yes O No	O Yes O No	O Yes O No			O 1 O 2 O 2+ O 3
	O Yes O No	O Yes O No	O Yes O No			O 1 O 2 O 2+ O 3

*Please attach a Material Safety Data Sheet or equivalent from the supplier.

2.0 Cell Culture

2.1 Does your work involve the use of cell cultures? xO YES O NO
If no, please proceed to Section 3.0

2.2 Please indicate the type of primary cells (i.e. derived from fresh tissue) that will be grown in culture:

Cell Type	Is this cell type used in your work?	Source of Primary Cell Culture Tissue	AUS Protocol Number
Human	O Yes x O No		Not applicable
Rodent	xO Yes O No	mouse fibroblastic cells	2009-060, 2009-051
Non-human primate	O Yes x O No		
Other (specify)	O Yes O No		

No

2.3 Please indicate the type of established cells that will be grown in culture in:

Cell Type	Is this cell type used in your work?	Specific cell line(s)*	Containment Level of each cell line	Supplier / Source of cell line(s)
Human	xO Yes O No	prostate stem cells, MDA-mb-231, MCF7, Melanoma WM1552C, Ovarian cancer SKOV3, OVCAR	2	Dr. Jim McCarthy's lab Minnesota, ATCC
Rodent	xO Yes O No	Rhamm-/-MEF, CD44-/-MEF, Rhamm-/-CD44-/MEF, 10T1/2, C3 10T1/2, MEF Rhamm+MEK, rat dermal fibroblasts, rat mesenchymal stem cells, Raw 264.7,	2	Our mice, ATCC
Non-human primate	O Yes xO No			
Other (specify)	O Yes xO No			

level 1 per ATCC.org

*Please attach a Material Safety Data Sheet or equivalent from the supplier. (For more information, see www.atcc.org)

2.4 For above named cell types(s) indicate PHAC or CFIA containment level required O 1 O 2 O 2+ O 3

3.0 Use of Human Source Materials

3.1 Does your work involve the use of human source materials? xO YES O NO
If no, please proceed to Section 4.0

3.2 Indicate in the table below the Human Source Material to be used.

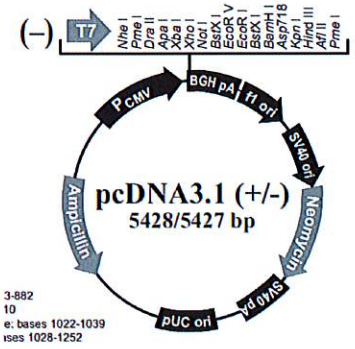
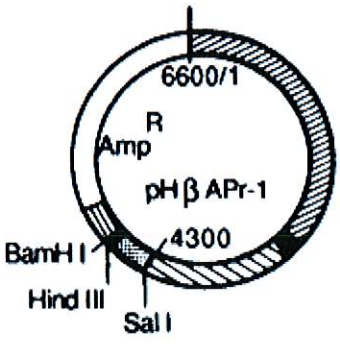
Human Source Material	**Source/Supplier /Company Name**	**Is Human Source Material Infected With An Infectious Agent? YES/UNKI**	**Name of Infectious Agent (If applicable)**	**PHAC or CFIA Containment Level (Select one)**
Human Blood (whole) or other Body Fluid		O Yes O Unknow		
Human Blood (fraction) or other Body Fluid		O Yes O Unknow		
Human Organs or Tissues (unpreserved)	LRCP patients, Dr. Trevor Shepherd	O Yes xO Unknown		xO 1 O 2 O 2+ O 3
Human Organs or Tissues (preserved)	Isu Abxis Accumax tissue arrays	Not Applicable		Not Applicable

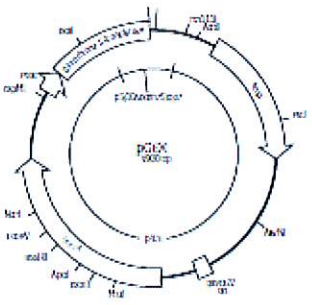
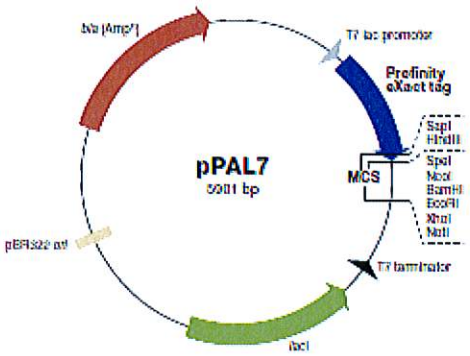
Containment Level?

4.0 Genetically Modified Organisms and Cell lines

4.1 Will genetic modifications be made to the microorganisms, biological agents, or cells described in Sections 1.0 and 2.0? xO YES O NO If no, please proceed to Section 5.0

4.2 Will genetic modification(s) involving plasmids be done? xO YES, complete table below O NO

Bacteria Used for Cloning *	Plasmid(s) **	Source of Plasmid	Gene Transfected	Describe the change that results from transformation or tranfection
E.coli K12 Strains: DH5 alpha XL-1 Blue Bl21 HB101 TOP10 *All plasmids are propagated in one of these strains*	*pCDNA3.1*	*Parental Vector from INVITROGEN. Inserts were generated in laboratory or obtained from ATCC/NCBI* 	*containing the following inserts:* *-RHAMM cDNAs from mouse and human.* *-RHAMM fusion protein vector containing RHAMM fused to ZsGreen coding sequence.* *-Mutant – Active MEK1 coding sequence from mouse.* *-H-RAS from Mouse*	*-Alterations in cell motility* *-Transformation of fibroblasts* *-Fluorescent proteins for visualization of protein trafficking*
	pH-Apr-1-Neo *pH-Apr-1-Hygro* *REFERENCE:* **Gunning, P., J. Leavitt, G. Muscat, S. Y. Ng, and L. Kedes.** 1987. A human beta-actin expression vector system directs high-level accumulation of antisense transcripts. Proc. Natl. Acad. Sci. USA **84**:4831–4835.	*Plasmid map attached. Plasmid generated by colleague referenced. Neo denotes Neomycin selection cassette and Hygro indicates Hygromycin selection cassette* 	*-RHAMM cDNAs from mouse and Human*	*-Alterations in cell motility* *-Transformation of fibroblasts*

	pGEX-2TK	*GE-HEALTHCARE* 	*-RHAMM cDNAs from mouse and Human for recombinant protein production in E.coli strains listed*	*None. Protein production*
	pPAL7	*BIORAD*  Fig. 1. Profinity eXact pPAL7 vector.	*-RHAMM cDNAs from mouse for recombinant protein production in E.coli strains listed*	*None. Protein production*

* Please attach a Material Data Sheet or equivalent if available.
** Please attach a plasmid map.

4.3 Will genetic modification(s) of bacteria and/or cells involving viral vectors be made?
O YES, complete table below xO NO

Virus Used for Vector Construction	Vector(s) *	Source of Vector	Gene(s) Transduced	Describe the change that results from transduction

* Please attach a Material Safety Data Sheet or equivalent.

4.4 Will genetic sequences from the following be involved?

- HIV O YES, please specify _____ xO NO
- HTLV 1 or 2 or genes from any Level 1 or Level 2 pathogens O YES, specify _____ xO NO
- SV 40 Large T antigen O YES xO NO
- E1A oncogene O YES xO NO
- Known oncogenes xO YES, please specify: RHAMM/HMMR, RAS, MEK1 _____ O NO
- Other human or animal pathogen and or their toxins O YES, please specify_____ O NO

4.5 Will virus be replication defective? O YES O NO

4.6 Will virus be infectious to humans or animals? O YES O NO

4.7 Will this be expected to increase the containment level required? O YES O NO

5.0 Human Gene Therapy Trials

5.1 Will human clinical trials be conducted involving a biological agent? O YES xO NO
(including but not limited to microorganisms, viruses, prions, parasites or pathogens of plant or animal origin)
If no, please proceed to Section 6.0

5.2 If YES, please specify which biological agent will be used: _____
Please attach a full description of the biological agent.

5.2 Will the biological agent be able to replicate in the host? O YES O NO

5.3 How will the biological agent be administered? _____

5.4 Please give the Health Care Facility where the clinical trial will be conducted:_____

5.5 Has human ethics approval been obtained? O YES, number: _____ O NO O PENDING

6.0 Animal Experiments

6.1 Will live animals be used? xO YES O NO If no, please proceed to section 7.0

6.2 Name of animal species to be used Mus Musculus (Mouse)

6.3 AUS protocol # _2009-060, 2009-051_____

6.4 Will any of the agents listed in section 4.0 be used in live animals xO YES, specify: Fibroblasts stably transfected with RHAMM cDNA will be used in Xenograft studies O NO

6.5 Will the agent(s) be shed by the animal: O YES xO NO, please justify: Cells used in study may form tumours in mammary fat pads, but these are not shed by the animal.

7.0 Use of Animal species with Zoonotic Hazards

7.1 Will any animals with zoonotic hazards or their organs, tissues, lavages or other body fluids including blood be used (see list below)? O YES XO No If no, please proceed to section 8.0

7.2 Will live animals be used? O YES O No

7.3 If yes, please specify the animal(s) used:

- Pound source dogs O YES O NO
- Pound source cats O YES O NO
- Cattle, sheep or goats O YES, please specify species _____ O NO
- Non-human primates O YES, please specify species _____ O NO
- Wild caught animals O YES, please specify species & colony # _____ O NO
- Birds O YES, please specify species _____ O NO
- Others (wild or domestic) O YES, please specify _____ O NO

7.4 If no live animals are used, please specify the source of the specimens:

_____

8.0 Biological Toxins

8.1 Will toxins of biological origin be used? O YES xO NO If no, please proceed to Section 9.0

8.2 If YES, please name the toxin(s)_____
Please attach information, such as a Material Safety Data Sheet, for the toxin(s) used.

8.3 What is the LD_{50} (specify species) of the toxin_____

8.4 How much of the toxin is handled at one time*? _____

8.5 How much of the toxin is stored*? _____

8.6 Will any biological toxins be used in live animals? O YES, Please provide details:_____ O NO

*For information on biosecurity requirements, please see:
http://www.uwo.ca/humanresources/docandform/docs/healthandsafety/biosafety/Biosecurity_Requirements.pdf

9.0 Insects

9.1 Do you use insects? O YES xO NO If no, please proceed to Section 10.0

9.2 If YES, please give the name of the species. _____

9.3 What is the origin of the insect? _____

9.4 What is the life stage of the insect? _____

9.5 What is your intention? O Initiate and maintain colony, give location: _____
O "One-time" use, give location: _____

9.6 Please describe the risk (if any) of escape and how this will be mitigated:

_____

_____

9.7 Do you use insects that require a permit from the CFIA permit? O YES O NO
If YES, Please attach the CFIA permit & describe any CFIA permit conditions:

10.0 Plants

10.1 Do you use plants? O YES xO NO If no, please proceed to Section 11.0

10.2 If YES, please give the name of the species. _____

10.3 What is the origin of the plant? _____

10.4 What is the form of the plant (seed, seedling, plant, tree...)? _____

10.5 What is your intention? O Grow and maintain a crop O "One-time" use

10.6 Do you do any modifications to the plant? O YES O NO
If yes, please describe: _____
_____

10.7 Please describe the risk (if any) of loss of the material from the lab and how this will be mitigated:
_____
_____
_____

10.8 Is the CFIA permit attached? O YES O NO
If YES, Please attach the CFIA permit & describe any CFIA permit conditions:
_____
_____

11.0 Import Requirements

11.1 Will any of the above agents be imported? O YES, please give country of origin_____ x O NO
If no, please proceed to Section 12.0

11.2 Has an Import Permit been obtained from HC for human pathogens? O YES O NO

11.3 Has an import permit been obtained from CFIA for animal or plant pathogens? O YES O NO

11.4 Has the import permit been sent to OHS? O YES, please provide permit # _____ O NO

12.0 Training Requirements for Personnel Named on Form

All personnel named on the above form who will be using any of the above named agents are required to attend the following training courses given by OHS:

- Biosafety
- Laboratory and Environmental/Waste Management Safety
- WHMIS (Western or equivalent)
- Employee Health and Safety Orientation

As the Principal Investigator, I have ensured that all of the personnel named on the form who will be using any of the biological agents in Sections 1.0 to 9.0 have been trained.

SIGNATURE 

13.0 Containment Levels

13.1 For the work described in sections 1.0 to 9.0, please indicate the highest HC or CFIA Containment Level required. O 1 xO 2 O 2+ O 3

13.2 Has the facility been certified by OHS for this level of containment?

xO YES, date of most recent biosafety inspection: Bio-LRCC-006

O NO, please certify

O NOT REQUIRED for Level 1 containment

Level 2 Biosafety Inspection Dec. 10, 2010 Marie Ryder

13.3 Please indicate permit number (not applicable for first time applicants):

Bio-LRCC-0006

14.0 Procedures to be Followed

14.1 Please describe additional risk reduction measures will be taken beyond containment level 1, 2, 2+ or 3 measures, that are unique to this agent.
No specific measures beyond standard biosafety associated with levels 1 and 2

14.2 Please outline what will be done if there is an exposure to the biological agents listed, such as a needlestick injury or an accidental splash:

- Seek first aid or emergent intervention if required (refer to MSDS for Infectious Substances, or Blood-Borne Pathogen exposure protocol: http://intra.sjhc.london.on.ca/policy/search_res.php?polid=STF008&live=1
- Immediately report injury, exposure to supervisor
- Notify Occupational Health and Safety Services (OHSS) ASAP. Complete Workplace Occurrence Report: http://appserver.lhsc.on.ca/policy/search_res.php?polid=OHS011&live=1

14.3 As the Principal Investigator, I will ensure that this project will follow the Western Biosafety Guidelines and Procedures Manual for Containment Level 1 & 2 Laboratories (and the Level 3 Facilities Manual for Level 3 projects). I will ensure that UWO faculty, staff and students working in my laboratory have an up-to-date Hazard Communication Form, found at http://www.wph.uwo.ca/

SIGNATURE _____ Date: June 29 / 11

15.0 Approvals

1) UWO Biohazards Subcommittee: SIGNATURE: _____
Date: _____

2) Safety Officer for the University of Western Ontario
SIGNATURE: _____
Date: _____

3) Safety Officer for Institution where experiments will take place (if not UWO):
SIGNATURE: Marie Ryder
Date: July 7, 2011

Approval Number: _____ Expiry Date (3 years from Approval): _____

Special Conditions of Approval:

Canadian Food Inspection Agency | Agence canadienne d'inspection des aliments

Office of Biohazard Containment and Safety
Science Branch, CFIA
59 Camelot Drive, Ottawa, Ontario K1A 0Y9
Tel: (613) 221-7068 Fax: (613) 228-6129
Email: ImportZoopath@inspection.gc.ca

Bureau du confinement des biorisques et sécurité
Direction générale des sciences, ACIA
59 promenade Camelot, Ottawa, Ontario K1A 0Y9
Tél: (613) 221-7068 Téléc: (613) 228-6129
Courriel: ImportZoopath@inspection.gc.ca

October 20th, 2009

Ms. Shamila Survery / Mr. Michael Decosimo
Cedarlane Laboratories Ltd
4410 Paletta Court
Burlington, Ontario L7L 5R2

By Facsimile: (289) 288-0020

SUBJECT: Importation of *Escherichia coli* strains

Dear Ms. Survery / Mr. Decosimo:

Our office received your query about the importation of *Escherichia coli* from the American Type Culture Collection (ATCC) located in Manassas, Virginia, United States. The following *Escherichia coli* strains are consider to be level 1 animal pathogens:

- 5K
- 58
- 58-161
- 679
- 1532
- AB284
- AB311
- AB1157
- AB1206
- AG1
- B
- BB4
- BD792
- BL21
- BL21 (DE3)
- BM25.8
- C
- C-1a
- C-3000
- C25
- C41 (DE3)
- C43 (DE3)
- C600
- Cavalli Hfr
- CIE85
- DH1
- DH10 GOLD
- DH10B
- DH5
- DH5-alpha
- DP50
- DY145
- DY380
- E11
- EJ183
- EL250
- EMG2
- EPI 300
- EZ10
- FDA Seattle 1946
- Fusion-Blue
- H1443
- HF4714
- HB101
- HS(PFAMP)R
- Hfr3000
- Hfr3000 X74
- HMS174
- J52
- J53
- JC3272
- JC7661
- JC9387
- JF1504
- JF1508
- JF1509
- JJ055
- JM83
- JM101
- JM109
- K12
- KC8
- KA802
- KAM32
- KAM33
- KAM43
- LE450
- LE451
- LE452
- MB408
- MBX1928
- MC1061
- MC4100 (MuLac)
- MG1655
- MM294
- MS101
- NC-7
- Nissle 1917
- One Shot STBL3
- OP50
- P678
- PA309
- PK-5
- PMC103
- PR13
- Rri
- RV308
- S17-1λ -PIR
- SCS1
- SMR10
- SOLR
- SuperchargeEZ10
- SURE
- TOP10
- TG1
- U5/41
- W208
- W945
- W1485
- W3104
- W3110
- WA704
- WP2
- X1854
- X2160T
- X2541
- X2547T
- XL1-BLUE
- XL1-BLUE-MRF
- XLOLR
- Y10
- Y1090 (1090)
- YN2980
- W3110
- WG1
- WG439
- WG443
- WG445

The Office of Biohazard Containment and Safety (BCS) of the Canadian Food Inspection Agency (CFIA) only issues import permits for microorganisms that are pathogenic to animals, or parts of microorganisms that are pathogenic to animals. As the products listed above are not considered pathogenic to animals, the Office of BCS does not have any regulatory requirements for their importation.

Please note that other legislation may apply. You may wish to contact the Public Health Agency of Canada's (PHAC) Office of Laboratory Security at (613) 957-1779.

Note: Microorganisms pathogenic to animals and veterinary biologics require an import permit from the CFIA.

Sincerely,

Cinthia Labrie

Cinthia Labrie
Head, Animal Pathogen Importation Program
Office of Biohazard Containment & Safety

Canada

ATCC | THE ESSENTIALS OF LIFE SCIENCE RESEARCH GLOBALLY DELIVERED

Info on cell Line(s)

ATCC Advanced Catalog Search » **Product Details**

Product Description

Before submitting an order you will be asked to read and accept the terms and conditions of ATCC's Material Transfer Agreement or, in certain cases, an MTA specified by the depositing institution.

Customers in Europe, Australia, Canada, China, Hong Kong, India, Israel, Japan, Korea, Macau, Mexico, New Zealand, Singapore, and Taiwan, R.O.C. must contact a local distributor for pricing information and to place an order for ATCC cultures and products.

Print this Page

Cell Biology

ATCC® Number: HTB-26™ Order this Item

Price: $279.00

Designations: MDA-MB-231

Depositors: R Cailleau

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: *Homo sapiens* (human)

Morphology: epithelial

PHOTO

Source:
Organ: mammary gland; breast
Disease: adenocarcinoma
Derived from metastatic site: pleural effusion
Cell Type: epithelial

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Applications: transfection host (Nucleofection technology from Lonza
Roche FuGENE® Transfection Reagents)

Receptors: epidermal growth factor (EGF), expressed
transforming growth factor alpha (TGF alpha), expressed

Tumorigenic: Yes

DNA Profile (STR):
Amelogenin: X
CSF1PO: 12,13
D13S317: 13
D16S539: 12
D5S818: 12
D7S820: 8,9
THO1: 7,9.3
TPOX: 8,9
vWA: 15,18

Cytogenetic Analysis: The cell line is aneuploid female (modal number = 64, range = 52 to 68), with chromosome counts in the near-triploid range. Normal chromosomes N8 and N15 were absent. Eleven stable rearranged marker chromosomes are noted as well as unassignable chromosomes in addition to the majority of autosomes that are trisomic. Many of the marker chromosomes are identical to those shown in the karyotype reported by K.L. Satya-Prakash, et al.

Related Links

NCBI Entrez Search

Cell Micrograph

Make a Deposit

Frequently Asked Questions

Material Transfer Agreement

Technical Support

Related Cell Culture Products

Login Required

Product Information Sheet

Isoenzymes:
AK-1, 1
ES-D, 1
G6PD, B
GLO-I, 2
Me-2, 1-2
PGM1, 1-2
PGM3, 1

Age: 51 years adult

Gender: female

Ethnicity: Caucasian

Comments: The cells express the WNT7B oncogene [PubMed: 8168088].

Propagation:

ATCC complete growth medium: The base medium for this cell line is ATCC-formulated Leibovitz's L-15 Medium, Catalog No. 30-2008. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.
Atmosphere: air, 100%
Temperature: 37.0°C

Subculturing:

Protocol:

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.
3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
   Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels.
6. Incubate cultures at 37°C without CO2.

Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:4 is recommended
Medium Renewal: 2 to 3 times per week

Preservation:

Freeze medium: Complete growth medium supplemented with 5% (v/v) DMSO
Storage temperature: liquid nitrogen vapor phase

Related Products:

Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2008
recommended serum:ATCC 30-2020
purified DNA:ATCC 45518
purified DNA:ATCC 45519
purified DNA:ATCC HTB-26D
purified RNA:ATCC HTB-26R

References:

1206: Brinkley BR, et al. Variations in cell form and cytoskeleton in human breast carcinoma cells in vitro. Cancer Res. 40: 3118-3129, 1980. PubMed: 7000337
22182: Cruciger Q, et al. Morphological, biochemical and chromosomal characterization of breast tumor lines from pleural effusions. In Vitro 12: 331, 1976.
22429: Siciliano MJ, et al. Mutually exclusive genetic signatures of human breast tumor cell lines with a common chromosomal marker. Cancer Res. 39: 919-922, 1979. PubMed: 427779
22532: Cailleau R, et al. Breast tumor cell lines from pleural effusions. J. Natl. Cancer Inst. 53: 661-674, 1974. PubMed: 4412247
22656: Cailleau R, et al. Long-term human breast carcinoma cell lines of metastatic origin: preliminary characterization. In Vitro 14: 911-915, 1978. PubMed: 730202
22977: Bates SE, et al. Expression of the transforming growth factor-alpha/epidermal growth factor receptor pathway in normal human breast epithelial cells. Endocrinology 126: 596-607, 1990. PubMed: 2294006
23010: Dickstein B, et al. Increased epidermal growth factor receptor in an estrogen-responsive, adriamycin-resistant MCF-7 cell line. J. Cell. Physiol. 157: 110-118, 1993. PubMed: 8408230
23113: Huguet EL, et al. Differential expression of human Wnt genes 2, 3, 4, and 7B in human breast cell lines and normal and disease states of human breast tissue. Cancer Res. 54: 2615-2621, 1994. PubMed: 8168088
26321: Satya-Prakash KL, et al. Cytogenetic analysis on eight human breast tumor cell lines: high frequencies of 1q, 11q and HeLa-like marker chromosomes. Cancer Genet. Cytogenet. 3: 61-73, 1981. PubMed: 7272986
32272: Katayose Y, et al. Promoting apoptosis: a novel activity associated with the Cyclin-dependent kinase inhibitor p27. Cancer Res. 57: 5441-5445, 1997. PubMed: 9407946
32275: Littlewood-Evans AJ, et al. The osteoclast-associated protease cathepsin K is expressed in human breast carcinoma. Cancer Res. 57: 5386-5390, 1997. PubMed: 9393764
32341: Sheng S, et al. Maspin acts at the cell membrane to inhibit invasion and motility of mammary and prostatic cancer cells. Proc. Natl. Acad. Sci. USA 93: 11669-11674, 1996. PubMed: 8876194
32489: De Vincenzo R, et al. Antiproliferative activity of colchicine analogues on MDR-positive and MDR-negative human cancer cell lines. Anticancer Drug Des. 13: 19-33, 1998. PubMed: 9474240
33021: Soker S, et al. Characterization of novel vascular endothelial growth factor (VEGF) receptors on tumor cells that bind VEGF165 via its exon 7-endoded domain. J. Biol. Chem. 271: 5761-5767, 1996. PubMed: 8621443

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Cell Biology

ATCC® Number: HTB-22™ Order this Item

Price: $279.00

Designations: MCF7

Depositors: CM McGrath

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: *Homo sapiens* (human)

Morphology: epithelial

PHOTO

Source:
Organ: mammary gland; breast
Disease: adenocarcinoma
Derived from metastatic site: pleural effusion
Cell Type: epithelial

Cellular Products: insulin-like growth factor binding proteins (iGFBP) BP-2; BP-4; BP-5

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Applications: transfection host (Nucleofection technology from Lonza
Roche FuGENE® Transfection Reagents)

Receptors: estrogen receptor, expressed

Antigen Expression: Blood Type O; Rh+

DNA Profile (STR):
Amelogenin: X
CSF1PO: 10
D13S317: 11
D16S539: 11,12
D5S818: 11,12
D7S820: 8,9
THO1: 6
TPOX: 9,12
vWA: 14,15

Cytogenetic Analysis: modal number = 82; range = 66 to 87.
The stemline chromosome numbers ranged from hypertriploidy to hypotetraploidy, with the 2S component occurring at 1%. There were 29 to 34 marker chromosomes per S metaphase; 24 to 28 markers occurred in at least 30% of cells, and generally one large submetacentric (M1) and 3 large subtelocentric (M2, M3, and M4) markers were recognizable in over 80% of metaphases. No DM were detected. Chromosome 20 was nullisomic and X was disomic.

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Isoenzymes:
AK-1, 1
ES-D, 1-2
G6PD, B
GLO-I, 1-2
PGM1, 1-2
PGM3, 1

Age: 69 years adult

Gender: female

Ethnicity: Caucasian

Comments: The MCF7 line retains several characteristics of differentiated mammary epithelium including ability to process estradiol via cytoplasmic estrogen receptors and the capability of forming domes.The cells express the WNT7B oncogene [PubMed: 8168088].
Growth of MCF7 cells is inhibited by tumor necrosis factor alpha (TNF alpha).
Secretion of IGFBP's can be modulated by treatment with anti-estrogens.

Propagation:
ATCC complete growth medium: The base medium for this cell line is ATCC-formulated Eagle's Minimum Essential Medium, Catalog No. 30-2003. To make the complete growth medium, add the following components to the base medium: 0.01 mg/ml bovine insulin; fetal bovine serum to a final concentration of 10% .
Atmosphere: air, 95%; carbon dioxide (CO_2), 5%
Temperature: 37.0°C

Subculturing:
Protocol: Volumes used in this protocol are for 75 sq cm flasks; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes.
Note: if floating cells are present, it is recommended that they be transferred at the first two (2) subcultures as described below. It is not necessary to transfer floating cells for subsequent subcultures.

1. Remove culture medium to a centrifuge tube.
2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin - 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor.
3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
   Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37C to facilitate dispersal.
4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.
5. Transfer the cell suspension to the centrifuge tube with the medium and cells from step 1, and centrifuge at approximately 125 xg for 5 to 10 minutes. Discard the supernatant.
6. Resuspend the cell pellet in fresh growth medium. Add appropriate aliquots of the cell suspension to new culture vessels.
7. Incubate cultures at 37C.

Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:6 is recommended
Medium Renewal: 2 to 3 times per week

Preservation:
Freeze medium: Complete growth medium supplemented with 5% (v/v) DMSO
Storage temperature: liquid nitrogen vapor phase

Doubling Time: 29 hrs

Related Products:
Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2003
recommended serum:ATCC 30-2020
purified DNA:ATCC HTB-22D
purified RNA:ATCC HTB-22R
0.25% (w/v) Trypsin - 0.53 mM EDTA in Hank' BSS (w/o Ca++, Mg++):ATCC 30-2101
Cell culture tested DMSO:ATCC 4-X

References:

21405: Sugarman BJ, et al. Recombinant human tumor necrosis factor-alpha: effects on proliferation of normal and transformed cells in vitro. Science 230: 943-945, 1985. PubMed: 3933111
22871: Takahashi K, Suzuki K. Association of insulin-like growth-factor-I-induced DNA synthesis with phosphorylation and nuclear exclusion of p53 in human breast cancer MCF-7 cells. Int. J. Cancer 55: 453-458, 1993. PubMed: 8375929
23046: Brandes LJ, Hermonat MW. Receptor status and subsequent sensitivity of subclones of MCF-7 human breast cancer cells surviving exposure to diethylstilbestrol. Cancer Res. 43: 2831-2835, 1983. PubMed: 6850594
23079: Lan MS, et al. Polypeptide core of a human pancreatic tumor mucin antigen. Cancer Res. 50: 2997-3001, 1990. PubMed: 2334903
23107: Pratt SE, Pollak MN. Estrogen and antiestrogen modulation of MCF7 human breast cancer cell proliferation is associated with specific alterations in accumulation of insulin-like growth factor-binding proteins in conditioned media. Cancer Res. 53: 5193-5198, 1993. PubMed: 7693333
23113: Huguet EL, et al. Differential expression of human Wnt genes 2, 3, 4, and 7B in human breast cell lines and normal and disease states of human breast tissue. Cancer Res. 54: 2615-2621, 1994. PubMed: 8168088
23217: Soule HD, et al. A human cell line from a pleural effusion derived from a breast carcinoma. J. Natl. Cancer Inst. 51: 1409-1416, 1973. PubMed: 4357757
25065: Bellet D, et al. Malignant transformation of nontrophoblastic cells is associated with the expression of chorionic gonadotropin beta genes normally transcribed in trophoblastic cells. Cancer Res. 57: 516-523, 1997. PubMed: 9012484
32275: Littlewood-Evans AJ, et al. The osteoclast-associated protease cathepsin K is expressed in human breast carcinoma. Cancer Res. 57: 5386-5390, 1997. PubMed: 9393764
32278: Komarova EA, et al. Intracellular localization of p53 tumor suppressor protein in gamma-irradiated cells is cell cycle regulated and determined by the nucleus. Cancer Res. 57: 5217-5220, 1997. PubMed: 9393737
32285: van Dijk MA, et al. A functional assay in yeas for the human estrogen receptor displays wild-type and variant estrogen receptor messenger RNAs present in breast carcinoma. Cancer Res. 57: 3478-3485, 1997. PubMed: 9270016
32288: Landers JE, et al. Translational enhancement of mdm2 oncogene expression in human tumor cells containing a stabilized wild-type p53 protein. Cancer Res. 57: 3562-3568, 1997. PubMed: 9270029
32344: Umekita Y, et al. Human prostate tumor growth in athymic mice: inhibition by androgens and stimulation by finasteride. Proc. Natl. Acad. Sci. USA 93: 11802-11807, 1996. PubMed: 8876218
32467: Zamora-Leon SP, et al. Expression of the fructose transporter GLUT5 in human breast cancer. Proc. Natl. Acad. Sci. USA 93: 1847-1852, 1996. PubMed: 8700847
32488: Geiger T, et al. Antitumor activity of a PKC-alpha antisense oligonucleotide in combination with standard chemotherapeutic agents against various human tumors transplanted into nude mice. Anticancer Drug Des. 13: 35-45, 1998. PubMed: 9474241
32547: Jang SI, et al. Activator protein 1 activity is involved in the regulation of the cell type-specific expression from the proximal promoter of the human profilaggrin gene. J. Biol. Chem. 271: 24105-24114, 1996. PubMed: 8798649
32568: Lee JH, et al. The proximal promoter of the human transglutaminase 3 gene. J. Biol. Chem. 271: 4561-4568, 1996. PubMed: 8626812
32582: Chang K, Pastan I. Molecular cloning of mesothelin, a differentiation antigen present on mesothelium, mesotheliomas, and ovarian cancers. Proc. Natl. Acad. Sci. USA 93: 136-140, 1996. PubMed: 8552591
32925: Zhu X, et al. Cell cycle-dependent modulation of telomerase activity in tumor cells. Proc. Natl. Acad. Sci. USA 93: 6091-6095, 1996. PubMed: 8650224
38764: Bacus SS, et al. Differentiation of cultured human breast cancer cells (AU-565 and MCF-7) associated with loss of cell surface HER-2/neu antigen. Mol. Carcinog. 3: 350-362, 1990. PubMed: 1980588

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Cell Biology

ATCC® Number: HTB-77™ Order this Item

Price: $279.00

Designations: SK-OV-3 [SKOV-3]

Depositors: G Trempe, LJ Old

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: *Homo sapiens* (human)

Morphology: epithelial

Source:
Organ: ovary
Disease: adenocarcinoma
Derived from metastatic site: ascites

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Restrictions: The cells are distributed for research purposes only. The Memorial Sloan-Kettering Cancer Center releases the line subject to the following: 1.) The cells or their products must not be distributed to third parties. Commercial interests are the exclusive property of Memorial Sloan-Kettering Cancer Center. 2.) Any proposed commercial use of these cells must first be negotiated with The Director, Office of Industrial Affairs, Memorial Sloan-Kettering Cancer Center, 1275 York Avenue, New York, NY 10021; phone (212) 639-6181; FAX (212) 717-3439.

Isolation: **Isolation date:** 1973

Applications: transfection host (Nucleofection technology from Lonza Roche FuGENE® Transfection Reagents)

Tumorigenic: Yes

Antigen Expression: Blood Type B; Rh+

DNA Profile (STR):
Amelogenin: X
CSF1PO: 11
D13S317: 8,11
D16S539: 12
D5S818: 11
D7S820: 13,14
THO1: 9,9.3
TPOX: 8,11
vWA: 17,18

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Cytogenetic Analysis: This is a hypodiploid human cell line. The modal chromosome number was 43, occurring in 63.3% of cells. The range was 42 to 45. The rate of higher ploidies was 32%. The del(1)(q21), der(13)t(1;?;13)(q11;?;q34), der(11)t(11;?) (q12), del(10)(q22) and 3 other marker chromosomes were common to most cells, and 3 others were found only in some cells. One N11 had the HSR segment from p11 to the distal end. The normal N10, N12, N15, N17 and N19 were absent. Others were either single or paired. There were from 1 to 6 rearranged and unassignable chromosomes. The X chromosome was either single or paired.

Isoenzymes:
AK-1, 1
ES-D, 1
G6PD, B
GLO-I, 1-2
Me-2, 1
PGM1, 1-2
PGM3, 1

Age: 64 years

Gender: female

Ethnicity: Caucasian

Comments: SK-OV-3 cells are resistant to tumor necrosis factor and to several cytotoxic drugs including diphtheria toxin, cis-platinum and adriamycin.

Propagation:

ATCC complete growth medium: The base medium for this cell line is ATCC-formulated McCoy's 5a Medium Modified, Catalog No. 30-2007. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.
Atmosphere: air, 95%; carbon dioxide (CO_2), 5%
Temperature: 37.0°C

Subculturing:

Protocol:

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.
3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
   Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels.
6. Incubate cultures at 37°C.

Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:6 is recommended
Medium Renewal: 2 to 3 times per week

Preservation:
Freeze medium: Complete growth medium supplemented with 5% (v/v) DMSO
Storage temperature: liquid nitrogen vapor phase

Related Products: Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2007
recommended serum:ATCC 30-2020

References:

21869: . Human tumor cells in vitro. New York: Plenum Press; 1975.
22536: Fogh J, et al. Absence of HeLa cell contamination in 169 cell lines derived from human tumors. J. Natl. Cancer Inst. 58: 209-214, 1977. PubMed: 833871
22539: Fogh J, et al. One hundred and twenty-seven cultured human tumor cell lines producing tumors in nude mice. J. Natl. Cancer Inst. 59: 221-226, 1977. PubMed: 327080
23103: Morimoto H, et al. Overcoming tumor necrosis factor and drug resistance of human tumor cell lines by combination treatment with anti-Fas antibody and drugs or toxins. Cancer Res. 53: 2591-2596, 1993. PubMed: 7684321
23478: Morimoto H, et al. Synergistic effect of tumor necrosis factor-alpha- and diphtheria toxin- mediated cytotoxicity in sensitive and resistant human ovarian tumor cell lines. J. Immunol. 147: 2609-2616, 1991. PubMed: 1918981
32281: Zhang X, et al. Microfilament depletion and circumvention of multiple drug resistance by sphinxolides. Cancer Res. 57: 3751-3758, 1997. PubMed: 9288783
32456: Clinton GM, et al. Estrogens increase the expression of fibulin-1, an extracellular matrix protein secreted by human ovarian cancer cells. Proc. Natl. Acad. Sci. USA 93: 316-320, 1996. PubMed: 8552629
32530: Zhang X, Smith CD. Microtubule effects of welwistatin, a cyanobacterial indolinone that circumvents multiple drug resistance. Mol. Pharmacol. 49: 288-294, 1996. PubMed: 8632761
90272: Wiechen K, et al. Suppression of the c-erbB-2 gene product decreases transformation abilities but not the proliferation and secretion of proteases of SK-OV-3 ovarian cancer cells. Br. J. Cancer 81: 790-795, 1999. PubMed: 10555747
90273: Yu D, et al. Enhanced c-erbB-2/neu expression in human ovarian cancer cells correlates with more severe malignancy that can be suppressed by E1A. Cancer Res. 53: 891-898, 1993. PubMed: 8094034
90274: Karlan BY, et al. Glucocorticoids stabilize HER-2/neu messenger RNA in human epithelial ovarian carcinoma cells. Gyn. Onc. 53: 70-77, 1994. PubMed: 7909787

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Cell Biology

ATCC® Number: HTB-161™ Order this Item

Price: $279.00

Designations: NIH:OVCAR-3

Depositors: R Ozols, TC Hamilton

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: *Homo sapiens* (human)

Morphology: epithelial

Source:
Organ: ovary
Disease: adenocarcinoma
Cell Type: epithelial

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Isolation: **Isolation date:** 1982

Applications: transfection host (Roche FuGENE® Transfection Reagents)

Receptors: androgen receptor, positive; estrogen receptor, positive; progesterone receptor, positive

Tumorigenic: Yes

DNA Profile (STR):
Amelogenin: X
CSF1PO: 11,12
D13S317: 12
D16S539: 12
D5S818: 11,12
D7S820: 10
THO1: 9,9.3
TPOX: 8
vWA: 17

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Cytogenetic Analysis: The cell line is aneuploid human female, with chromosome counts in the sub to near-triploid range. Several normal chromosomes (N11, N13, N14, N15, N16, N17, and N22) are clearly under-represented. Many of these missing chromosomes are represented in the large number of cytogenetically altered chromosomes identified as marker chromosomes. In addition to the marker chromosomes, there are a large number of other structurally abnormal and unassignable chromosomes that are not recognized as markers. Random loss and gain of chromosomes from cell to cell are noted in the exact chromosome counts and in the analysis of the karyotypes.

Isoenzymes:
AK-1, 1
ES-D, 1
G6PD, B
GLO-I, 1
PGM1, 1
PGM3, 1

Age: 60 years

Gender: female

Ethnicity: Caucasian

Comments: The NIH:OVCAR-3 line was established in 1982 by T.C. Hamilton, et al. from the malignant ascites of a patient with progressive adenocarcinoma of the ovary.
Forms colonies in soft agar and has an abnormal karyotype.
Resistant to clinically relevant concentrations of adriamycin, melphalan and cisplatin.
Both cultured cells and xenografts exhibit androgen and estrogen receptors.
Xenograft models have been used to show that treatment with 17 beta estradiol can induce progesterone receptors in this human ovarian carcinoma.
NIH:OVCAR-3 is an appropriate model system in which to study drug resistance in ovarian cancer, and the presence of hormone receptors should be useful for the evaluation of hormonal therapy.

Propagation:
ATCC complete growth medium: The base medium for this cell line is ATCC-formulated RPMI-1640 Medium, Catalog No. 30-2001. To make the complete growth medium, add the following components to the base medium: 0.01 mg/ml bovine insulin; fetal bovine serum to a final concentration of 20%.
Temperature: 37.0°C
Atmosphere: air, 95%; carbon dioxide (CO2), 5%

Subculturing:
Protocol: Volumes used in this protocol are for 75 sq cm flasks; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes.

- Remove and discard culture medium.
- Briefly rinse the cell layer with Ca++/Mg++ free Dulbecco's phosphate-buffered saline (D-PBS) or 0.25% (w/v) Trypsin - 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor.
- Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
  Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37C to facilitate dispersal.
- Add 2.0 to 3.0 ml of complete growth medium and aspirate cells by gently pipetting
- Resuspend the cell pellet in fresh growth medium. Add appropriate aliquots of the cell suspension to new culture vessels.
- Incubate cultures at 37C.

Subcultivation Ratio: A subcultivation ratio of 1:2 to 1:4 is recommended
Medium Renewal: Every 2 to 3 days

Preservation:
Freeze medium: Complete growth medium, 95%; DMSO, 5%
Storage temperature: liquid nitrogen vapor temperature

Related Products: Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2001
recommended serum:ATCC 30-2020

References:

1127: Hamilton TC, et al. Characterization of a human ovarian carcinoma cell line (NIH:OVCAR-3) with androgen and estrogen receptors. Cancer Res. 43: 5379-5389, 1983. PubMed: 6604576
1128: Hamilton TC, et al. Induction of progesterone receptor with 17beta-estradiol in human ovarian cancer. J. Clin. Endocrinol. Metab. 59: 561-563, 1984. PubMed: 6746867
22949: Rogan AM, et al. Reversal of adriamycin resistance by verapamil in human ovarian cancer. Science 224: 994-996, 1984. PubMed: 6372095
23051: Hamilton TC, et al. Characterization of a xenograft model of human ovarian carcinoma which produces ascites and intraabdominal carcinomatosis in mice. Cancer Res. 44: 5286-5290, 1984. PubMed: 6333272
23052: Green JA, et al. Potentiation of melphalan cytotoxicity in human ovarian cancer cell lines by glutathione depletion. Cancer Res. 44: 5427-5431, 1984. PubMed: 6488194
23100: Caffrey PB, Frenkel GD. Selenite cytotoxicity in drug resistant and nonresistant human ovarian tumor cells. Cancer Res. 52: 4812-4816, 1992. PubMed: 1511444
23164: Hamilton TC, et al. Experimental model systems of ovarian cancer: applications to the design and evaluation of new treatment approaches. Semin. Oncol. 11: 285-298, 1984. PubMed: 6385258
23329: Godwin AK, et al. High resistance to cisplatin in human ovarian cancer cell lines is associated with marked increase of glutathione synthesis. Proc. Natl. Acad. Sci. USA 89: 3070-3074, 1992. PubMed: 1348364
32582: Chang K, Pastan I. Molecular cloning of mesothelin, a differentiation antigen present on mesothelium, mesotheliomas, and ovarian cancers. Proc. Natl. Acad. Sci. USA 93: 136-140, 1996. PubMed: 8552591
32690: Omelyanenko V, et al. HPMA copolymer-anticancer drug-OV-TL16 antibody conjugates. II. Processing in epithelial ovarian carcinoma cells in vitro. Int. J. Cancer 75: 600-608, 1998. PubMed: 9466663

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Cell Biology

ATCC® Number: CRL-1213™ Order this Item

Price: $429.00

Designations: FR (Rat Dermal Fibroblastic)

Depositors: B Smith

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: Rattus norvegicus (rat)

Morphology: fibroblast

PHOTO

Source:
Organ: skin
Strain: Sprague-Dawley
Disease: normal

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Age: 18 days gestation

Propagation:
ATCC complete growth medium: The base medium for this cell line is ATCC-formulated Eagle's Minimum Essential Medium, Catalog No. 30-2003. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.
Temperature: 37.0°C

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Subculturing:

Protocol: Volumes used in this protocol are for 75 sq cm flasks; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes.

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with Ca++/Mg++ free Dulbecco's phosphate-buffered saline (D-PBS) or 0.25% (w/v) Trypsin - 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor.
3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 10 to 20 minutes).
   Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37C to facilitate dispersal.
4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels.
6. Incubate cultures at 37°C.
   Subcultivation Ratio: A subcultivation ratio of 1:3 is recommended
   Medium Renewal: 2 to 3 times per week

Preservation:

Freeze medium: Complete growth medium, 95%; DMSO, 5%
Storage temperature: liquid nitrogen vapor phase

Related Products:

Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2003
recommended serum:ATCC 30-2020
0.25% (w/v) Trypsin - 0.53mM EDTA in Hank's BSS (w/o Ca++, Mg ++): ATCC 30-2101
Phosphate-buffered saline: ATCC 30-2200
Cell culture tested DMSO: ATCC 4-X

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Cell Biology

ATCC® Number: CCL-226™ Order this Item

Price: $279.00

Designations: C3H/10T1/2, Clone 8

Depositors: C Heidelberger

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: *Mus musculus* (mouse)

Morphology: fibroblast

PHOTO

Source: **Strain:** C3H
Organ: embryo

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Applications: transfection host (Roche FuGENE® Transfection Reagents)

Tumorigenic: No

Antigen Expression: H-2k

Cytogenetic Analysis: Mouse karyotype with a modal number of 80 chromosomes.

Age: embryo

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Comments:

C3H/10T1/2, Clone 8 was isolated by C. Reznikoff, D. Brankow and C. Heidelberger in 1972 from a line of C3H mouse embryo cells. [23019]
The cells are very sensitive to post confluence inhibition of cell division, do not produce tumors in syngeneic mice, have no background of spontaneous transformation, nor do they contain overt endogenous transforming murine leukemia or sarcoma viruses. [22697]
The cells are contact sensitive.
There is no detectable background spontaneous transformation.
They are highly susceptible to transformation by chemical agents. [1208]
Tested and found negative for ectromelia virus (mousepox).
NOTE: THE INOCULATION DENSITY, FEEDING AND HARVESTING SCHEDULES MUST BE FOLLOWED RIGIDLY IF THE LINE IS TO RETAIN ITS ESSENTIAL CHARACTERISTICS.
THE BATCH OF SERUM USED FOR GROWTH AND FOR TRANSFORMATION ASSAYS MAY AFFECT BOTH THE MORPHOLOGY OF THIS LINE AND THE RESULTS OBTAINED.
Monolayers established and maintained for the standard transformation assay should be free of all foci after 6 weeks. [1208]
The donor recommends that the line be used between the 5th and 15th passages only.

Propagation:

ATCC complete growth medium: The base medium for this cell line is Eagle's Basal medium with 2 mM L-glutamine , 1.5 g/L sodium bicarbonate and Earle's BSS. To make the complete growth medium, add the following components to the base medium: heat-inactivated fetal bovine serum to a final concentration of 10%.
Temperature: 37.0°C
Atmosphere: air, 95%; carbon dioxide (CO2), 5%

Subculturing:

Protocol: Remove medium, and rinse with 0.25% trypsin, 0.53 mM EDTA solution. Remove the solution and add an additional 1 to 2 ml of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks. SUBCULTURE MUST BE DONE BEFORE THE CULTURE REACHES CONFLUENCE.
Subcultivation Ratio: Seed new flasks at 2000 viable cells/sq cm.
Medium Renewal: Once between subcultures if necessary

Preservation:

Freeze medium: Complete growth medium 95%; DMSO, 5%
Storage temperature: liquid notrogen vapor temperature

References:

1208: Reznikoff CA, et al. Quantitative and qualitative studies of chemical transformation of cloned C3H mouse embryo cells sensitive to postconfluence inhibition of cell division. Cancer Res. 33: 3239-3249, 1973. PubMed: 4796800
1209: Terzaghi M, Little JB. Repair of potentially lethal radiation damage in mammalian cells is associated with enhancement of malignant transformation. Nature 253: 548-549, 1975. PubMed: 1167940
1210: Mondal S, Heidelberger C. Transformation of C3H/10T1/2 CL8 mouse embryo fibroblasts by ultraviolet irradiation and a phorbol ester. Nature 260: 710-711, 1976. PubMed: 1264242
22440: Smith GJ, et al. Clonal analysis of the expression of multiple transformation phenotypes and tumorigenicity by morphologically transformed 10T1/2 cells. Cancer Res. 53: 500-508, 1993. PubMed: 8425183
22697: Rapp UR, et al. Endogenous oncornaviruses in chemically induced transformation. I. Transformation independent of virus production. Virology 65: 392-409, 1975. PubMed: 165619
23019: Reznikoff CA, et al. Establishment and characterization of a cloned line of C3H mouse embryo cells sensitive to postconfluence inhibition of division. Cancer Res. 33: 3231-3238, 1973. PubMed: 4357355
33039: Jain MK, et al. Molecular cloning and characterization of SmLIM, a developmentally regulated LIM protein preferentially expressed in aortic smooth muscle cells. J. Biol. Chem. 271: 10194-10199, 1996. PubMed: 8626582

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Cell Biology

ATCC® Number: TIB-71™ Order this Item

Price: $279.00

Designations: RAW 264.7

Depositors: WC Raschke

Biosafety Level: 2

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: *Mus musculus* (mouse)

Morphology: monocyte/macrophage

Source:
Tissue: ascites
Strain: BALB/c
Disease: Abelson murine leukemia virus-induced tumor
Cell Type: macrophage; Abelson murine leukemia virus transformed

Cellular Products: lysozyme [1207]

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Applications: Biological response [92560]
transfection host (Roche FuGENE® Transfection Reagents)

Receptors: complement (C3) [1207]

Antigen Expression: H-2d

Age: adult

Gender: male

Comments: This line was established from a tumor induced by Abelson murine leukemia virus. They are negative for surface immunoglobulin (sIg-), Ia (Ia-) and Thy-1.2 (Thy-1.2)This line does not secrete detectable virus particles and is negative in the XC plaque formation assay. The cells will pinocytose neutral red and will phagocytose latex beads and zymosan. They are capable of antibody dependent lysis of sheep erythrocytes and tumor cell targets. LPS or PPD treatment for 2 days stimulates lysis of erythrocytes but not tumor cell targets.Data communicated in Feb. 2007 by Dr Janet W. Hartley, indicates the expression of infectious ecotropic MuLV closely related, if not identical, to the Moloney MuLV helper virus used in the original virus inoculum. The cells also express polytropic MuLV, unsurprisingly based on the mouse passage history of the virus stocks [PubMed 18177500].

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Propagation:

ATCC complete growth medium: The base medium for this cell line is ATCC-formulated Dulbecco's Modified Eagle's Medium, Catalog No. 30-2002. To make the complete growth medium, add the following components to the base medium: fetal bovine serum to a final concentration of 10%.
Atmosphere: air, 95%; carbon dioxide (CO2), 5%
Temperature: 37.0°C

Subculturing:

Protocol: Subcultures are prepared by scraping.
For a 75 cm2 flask, remove all but 10 ml culture medium (adjust amount accordingly for other culture vessels). Dislodge cells from the flask substrate with a cell scraper; aspirate and add appropriate aliquots of the cell suspension into new culture vessels.
Subcultivation Ratio: A subcultivation ratio of 1:3 to 1:6 is recommended
Medium Renewal: Replace or add medium every 2 to 3 days.

Preservation:

Freeze medium: Complete growth medium supplemented with 5% (v/v) DMSO
Storage temperature: liquid nitrogen vapor phase

Related Products:

Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2002
recommended serum:ATCC 30-2020

References:

1135: Ralph P, Nakoinz I. Antibody-dependent killing of erythrocyte and tumor targets by macrophage-related cell lines: enhancement by PPD and LPS. J. Immunol. 119: 950-954, 1977. PubMed: 894031
1207: Raschke WC, et al. Functional macrophage cell lines transformed by Abelson leukemia virus. Cell 15: 261-267, 1978. PubMed: 212198
32443: Denlinger LC, et al. Regulation of inducible nitric oxide synthase expression by macrophage purinoreceptors and calcium. J. Biol. Chem. 271: 337-342, 1996. PubMed: 8550583
32466: Hambleton J, et al. Activation of c-Jun N-terminal kinase in bacterial lipopolysaccharide-stimulated macrophages. Proc. Natl. Acad. Sci. USA 93: 2774-2778, 1996. PubMed: 8610116
32553: Taylor GA, et al. Identification of anovel GTPase, the inducibly expresed GTPase, that accumulates in response to interferon gamma. J. Biol. Chem. 271: 20399-20405, 1996. PubMed: 8702776
32901: Li YM, et al. Molecular identity and cellular distribution of advanced glycation endproduct receptors: relationship of p60 to OST-48 and p90 to 80K-H membrane proteins. Proc. Natl. Acad. Sci. USA 93: 11047-11052, 1996. PubMed: 8855306
33046: Panneerselvam K, Freeze HH. Mannose enters mammalian cells using a specific transporter that is insensitive to glucose. J. Biol. Chem. 271: 9417-9421, 1996. PubMed: 8621609
33076: Lokuta MA, et al. Mechanisms of murine RANTES chemokine gene induction by newcatle disease virus. J. Biol. Chem. 271: 13731-13738, 1996. PubMed: 8662857
33162: Taylor MF, et al. In vitro efficacy of morpholino-modified antisense oligomers directed against tumor necrosis factor-alpha mRNA. J. Biol. Chem. 271: 17445-17452, 1996. PubMed: 8663413
92560: Standard Practice for Testing for Biological Responses to Particles in Vitro. West Conshohocken, PA:ASTM International;ASTM Standard Test Method F 1903-98R03.
16173094: Hartley JW, et al. Expression of infectious murine leukemia viruses by RAW264.7 cells, a potential complication for studies with a widely used mouse macrophage cell line. Retrovirology. 4: 5:1, 2008. PubMed 18177500.

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Cell Biology

ATCC® Number: CRL-2192™ Order this Item

Price: $279.00

Designations: NR8383 [AgC11x3A, NR8383.1]

Depositors: RJ Helmke

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: mixed, adherent and suspension

Organism: Rattus norvegicus (rat)

Morphology: macrophage

Source:
Strain: Sprague-Dawley
Organ: lung
Disease: normal
Cell Type: macrophage (alveolar);

Cellular Products: transforming growth factor beta (TGF beta); interleukin 1 (IL-1); interleukin 6 (IL-6)

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Isolation: **Isolation date:** August 3, 1983

Receptors: Fc

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Comments:

NR8383 (normal rat, August 3, 1983) was established from normal rat alveolar macrophage cells obtained by lung lavage.
The cells were cultured in the presence of gerbil lung cell conditioned medium for approximately 8 to 9 months.
Subsequently the requirement for exogenous growth factors was lost.
NR8383 cells were cloned and subcloned from single cells by limiting dilution, and then subcloned from soft agar three times.
The cells exhibit characteristics of macrophage cells:
Phagocytosis of zymosan and Pseudomonas aeruginosa, nonspecific esterase activity, Fc receptors, oxidative burst,IL-1, TNF beta and IL-6 secretion, and replicative response to exogenous growth factors.
The cells respond to appropriate microbial, particulate or solubte stimuli with phagocytosis and killing.
NR8383 cells respond to bleomycin by secreting latent transforming growth factor (TGF beta).
Stimulation with bleomycin also increases TGF beta mRNA expression.
These cells are sensitive to endotoxin.
LPS levels of 1 to 10 ng/ml inhibit replication by 50%.
LPS inhibition is nontoxic and reversible even after levels up to 0.001 mg/ml for extended periods.
The NR8383 cell line provides a homogenous source of highly responsive alveolar macarophages which can be used in vitro to study macrophage related activities.

Propagation:

ATCC complete growth medium: Ham's F12K medium with 2 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate, 85%; heat inactivated fetal bovine serum, 15%
Temperature: 37.0°C

Subculturing:

Protocol: Cultures can be maintained by transferring floating cells to additional flasks. Adherent cells may be harvested by scraping. Upon reseeding, about one half of the cells will re-attach. Cultures are most successful when set up at a floating cell concentration of 1 to 4 X 10 exp5 viable cells/ml.
Medium Renewal: Two to three times weekly

Preservation:

Freeze medium: Complete growth medium, 95%; DMSO, 5%
Storage temperature: liquid nitrogen vapor phase

Related Products:

Recommended medium (without the additional supplements or serum described under ATCC Medium):ATCC 30-2004
purified RNA:ATCC CRL-2192R

References:

22160: Hidalgo HA, et al. Pneumocystis carinii induces an oxidative burst in alveolar macrophages. Infect. Immun. 60: 1-7, 1992. PubMed: 1729174
22316: Helmke RJ, et al. A continuous alveolar macrophage cell line: comparisons with freshly derived alveolar macrophages. In Vitro Cell. Dev. Biol. 25: 44-48, 1989. PubMed: 2914814
22674: Helmke RJ, et al. From growth factor dependence to growth factor responsiveness: the genesis of an alveolar macrophage cell line. In Vitro Cell. Dev. Biol. 23: 567-574, 1987. PubMed: 3497918
22848: Limper AH, Standing JE. Vitronectin interacts with Candida albicans and augments organism attachment to the NR8383 macrophage cell line. Immunol. Lett. 42: 139-144, 1994. PubMed: 7534269
22970: Hidalgo HA, et al. The effects of cyclosporine and dexamethasone on an alveolar macrophage cell line (NR8383). Transplantation 53: 620-623, 1992. PubMed: 1549855
23173: Denholm EM, Rollins SM. Expression and secretion of transforming growth factor-beta by bleomycin-stimulated rat alveolar macrophages. Am. J. Physiol. 264: L36-L42, 1993. PubMed: 7679254
23190: Krieg DP, et al. Resistance of mucoid Pseudomonas aeruginosa to nonopsonic phagocytosis by alveolar macrophages in vitro. Infect. Immun. 56: 3173-3169, 1988. PubMed: 3141284
23369: Sherman MP, et al. Pyrrolidine dithiocarbamate inhibits induction of nitric oxide synthase activity in rat alveolar macrophages. Biochem. Biophys. Res. Commun. 191: 1301-1308, 1993. PubMed: 7682068
23484: Griscavage JM, et al. Inducible nitric oxide synthase from a rat alveolar macrophage cell line is inhibited by nitric oxide. J. Immunol. 151: 6329-6337, 1993. PubMed: 7504017
23566: Henderson SA, et al. Nitric oxide reduces early growth response-1 gene expression in rat lung macrophages treated with interferon-gamma and lipopolysaccharide. J. Biol. Chem. 269: 25239-25242, 1994. PubMed: 7523382
36466: Huang S, et al. Rat KC cDNA cloning and mRNA expression in lung macrophages and fibroblasts. Biochem. Biophys. Res. Commun. 184: 922-929, 1992. PubMed: 1374243

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Cell Biology

ATCC® Number: CRL-2808™ Order this Item **Price:** $338.00

Designations: WM1552C [Part of the Wistar Special Collection]

Depositors: M Herlyn

Biosafety Level: 1

Shipped: frozen

Medium & Serum: See Propagation

Growth Properties: adherent

Organism: *Homo sapiens* (human)

Morphology: Spindle-shaped

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Source: **Organ:** skin
Tumor Stage: stage 3?
Disease: primary superficial spreading melanoma (SSM) (radial growth phase (RGP)/vertical growth phase (VGP))

Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.

Restrictions: Distribution of this cell line is governed by the Wistar Special Collection Material Transfer Agreement.

Isolation: **Isolation date:** February 8, 1988

Tumorigenic: Yes

Age: 72 years

Gender: male

Comments: The WM1552C line was established from a primary superficial spreading melanoma (SSM) in radial growth phase (RGP)/vertical growth phase (VGP) from the buttocks of a patient on 02/08/88.

Propagation: **ATCC complete growth medium:** 2% Tumor Medium (Tu2%) containing a 4:1 mixture of MCDB 153 medium with 1.5 g/L sodium bicarbonate and Leibovitz's L-15 medium with 2 mM L-glutamine supplemented with 0.005 mg/ml bovine insulin, 1.68 mM CaCl2, and 2% fetal bovine serum.
Atmosphere: air, 95%; carbon dioxide (CO2), 5%
Temperature: 37.0°C

Subculturing:

Protocol:

1. Remove and discard culture medium.
2. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum that contains trypsin inhibitor.
3. Add 2.0 to 3.0 ml of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes).
   Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal.
4. Add 6.0 to 8.0 ml of complete growth medium and aspirate cells by gently pipetting.
5. Add appropriate aliquots of the cell suspension to new culture vessels.
   An inoculum of 5 X 10(3) to 7 X 10(3) viable cells/cm2 is recommended. .
6. Incubate cultures at 37°C.

Interval: Maintain cultures at a cell concentration between 1 X 10(4) and 7 X 10(4) cells/cm2
Subcultivation Ratio: A subcultivation of 1:3 to 1:4 is recommended
Medium Renewal: Two to three times weekly

Preservation:

Freeze medium: Complete growth medium supplemented with an additional 8% fetal bovine serum and 5% (v/v) DMSO
Storage temperature: liquid nitrogen vapor phase

Doubling Time: 42 hours

Related Products: recommended serum:ATCC 30-2020

References:

89402: Hsu MY, et alMelanoma: The Wistar (WM) melanoma cell lines*In:* Hsu MY, et alHuman Cell Culture1Great BritainKluwer Academic Publishers259-274, 1999
89403: Satyamoorthy K, et al. Melanoma cell lines from different stages of progression and their biological and molecular analyses. Melanoma Res. 7: S35-S42, 1997. PubMed: 9578415

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