DTP, DCTD TUMOR REPOSITORY

A CATALOG OF *IN VITRO* CELL LINES, TRANSPLANTABLE ANIMAL AND HUMAN TUMORS AND YEAST

Operated by Charles River Laboratories, Inc.

under contract to the Biological Testing Branch of the National Cancer Institute at Frederick, MD.

Frederick, Maryland 21702-1201

Sponsored by:

Biological Testing Branch

Developmental Therapeutics Program

Division of Cancer Treatment and Diagnosis

National Cancer Institute

National Institutes of Health

http://dtp.nci.nih.gov

Updated: 05/2015

Table of Contents

Introduction	 3
Purchasing Procedures	4
Material Transfer Agreement	 7
Procedures	 9
Human Tumors	12
Hamster Tumors	18
Mouse Tumors	20
Mouse Tumors from the Jackson Laboratory	 37
Rabbit Tumors	39
Rat Tumors	 41
Rat Tumors from Dr. Robert Noble	 45
In Vitro Established Cell Lines	 48
Human <i>In Vitro</i> Cell Lines	49
NIH Licensed Cell Lines	 53
NCI Anti-Cancer Cell Line Panel	55
Non-Human <i>In Vitro</i> Cell Lines	 59
Yeast Strains	 61
Index	63

Introduction

The Division of Cancer Treatment and Diagnosis (DCTD), National Cancer Institute, has maintained since the early 1960s a low temperature repository of transplantable *in vivo*-derived tumors and *in vitro*-established tumor cell lines from various species. Located at the National Cancer Institute in Frederick, Maryland, the DCTD Tumor Repository serves as a resource for viable, contaminant-free experimental tumor lines, many of which are not obtainable elsewhere. The Repository makes these materials available to qualified investigators as a service to the research community.

The Repository's tumor collection contains a wide variety of frozen types of human and animal origin. Virtually all of the human tumors are xenografts grown in athymic nude mice, although there are some that grow in conditioned rats or in hamster's cheek pouch. Several mouse leukemia lines in the collection are resistant to single drugs of varying modes of action. Multidrug-resistant lines are also available. In addition, the collection includes variant sub-lines of B16 melanomas that exhibit a different degree of metastasis to various organs.

The tumors in this catalog are categorized by species, namely human, hamster, guinea pig, mouse, rabbit and rat. Within animal species, the list is in alphabetical order by tumor designation. Tumors with numeric designations are listed at the end. Human tumors are grouped by tumor type.

We request that the DCTD Tumor Repository, National Cancer Institute at Frederick, Maryland, be cited in publications as the source of tumor materials. We also request that reprints of publications be furnished to the Repository.

Previous Contract Locations of the Tumor Repository include Microbiological Associates, Inc., Bethesda, MD; Arthur D. Little, Inc., Cambridge, MA; and Mason Research Institute, Worcester, MA.

DTP/DCTD/NCI Tumor Repository Purchasing Procedures Ordering Tumor Fragments, Cell Lines and Yeast

Tumor materials are furnished to qualified investigators affiliated only with recognized research laboratories.

Items 1-3 are required to receive materials:

- 1. Send a **Letter of Request** on official institutional letterhead
- 2. Provide a Purchase Order or **method of payment** (see purchase procedures)
- 3. Send the Material Transfer Agreement (MTA) with signatures affixed from both the requestor and authorizing official (required by NCI). Please print or type this document.

Requests will be processed after receipt of all three required items. Legible MTAs may be submitted by standard mail or by email. **Facsimile transmitted MTAs are not accepted**. Please send the necessary paperwork to:

Ms. Christine Pacula-Cox BTB/DTP/DCTD/NCI/NIH P.O. Box B, Bldg. 1043/7 Frederick, MD 21702 paculac@mail.nih.gov Phone: 301.846.1709

- The letter should briefly describe the requested materials, the research project(s), and indicate the method of payment
- Multiple cell lines may be ordered using a single MTA
- Clearly identify each requested item under #1 on the MTA or use an addendum page
- Newly requested material and MTA renewals will require completion of a new MTA
- An MTA is active for a period of three years from the date of execution
- Re-orders by the same investigator for previously received material should indicate the active MTA number in an email or letter of request, along with method of payment information
- A Federal Express account number to which the shipment can be charged is now required for all Domestic requests

<u>International Recipients:</u> The DCTD Tumor Repository obtains U.S Exportation Declarations for each shipment. <u>Recipients must obtain the applicable import permits as required by the recipient's country</u>. Please submit the import document or permit number by email so we may apply for the necessary export document.

NOTE: As of January 1, 2013, international recipients are required to make their own shipping arrangements for research material.

- When feasible, your facility Federal Express number may be provided to defray shipping costs.
 For those delivery sites where Federal Express does not operate, the recipient must arrange
 for delivery through World Courier and provide the applicable job number and contact
 name/number to the DCTD Tumor Repository staff (alternatively the World Courier
 representative may contact the Charles River staff directly).
- International Federal Express shipments are sent on Mondays unless otherwise requested
- The DCTD Tumor Repository does not issue official quotes or pro-forma invoices
- Charles River Laboratories can issue a commercial invoice with an approved MTA

- The DCTD Tumor Repository <u>will not</u> be responsible for the loss of material due to delays in customs. The box is packed with enough dry ice for a 3-4 day delivery of viable cells. Hand couriered packages (by World Courier) will be re-iced during longer trips by the carrier.
- You must provide the requisite import papers and permit numbers where required
- <u>Canadian requestors</u>: Canadian Customs has approved shipments with a one page declaration attached to the box. Investigators should acquire this document from the Department of Agriculture or Health Department. The document, stating the material is used for research purposes only and is non-toxic, non-infectious and non-hazardous, must be signed by the Agency. Please fax or e-mail this document for inclusion in the shipment along with the U.S. Export papers.
- For UK, a Value Added Tax (VAT) number is needed as well

Other contact numbers:

Cell Line/Tumor Availability, Scientific & International Requests

Christine Pacula-Cox, BTB/DTP/DCTD/NCI/NIH

Phone: 301.846.1709

Email: paculac@mail.nih.gov

DTP/DCTD/NCI Repository Invoicing Procedures

Invoicing for Tumor Fragments, Cell Lines and Yeast

Purchase Order goes to:

Charles River Laboratories, Inc. c/o Christine Pacula-Cox Box B, Bldg. 1043/7

Email: paculac@mail.nih.gov

Phone: 301.846.1709

Payment goes to:

Charles River Laboratories, Inc. GPO Box 27812 New York, NY 10087-7812 CRL Federal Tax ID #76-0609980

Charles River Laboratories is the contractor operating the DCTD Tumor Repository. Shipping and handling charges are invoiced to the recipient to offset the costs associated with maintaining inventory, retrieving, packaging, and shipping all requested samples. Invoices are issued approximately two weeks after receipt of research material.

Charles River Laboratories accepts the following credit cards for remittance: VISA, MASTERCARD and AMERICAN EXPRESS

Please provide credit card details by phone or email. Purchase orders with a PO number are also accepted. If using a P.O. please send a copy by email.

W-9 & Invoicing and Shipping Questions

Michele Driver <u>driverm@mail.nih.gov</u>
Dan Danner <u>dannerw@mail.nih.gov</u>
Leroy Smith <u>smithl5@mail.nih.gov</u>

Charles River Laboratories, Phone: 301.846.5748

Shipping and Handling Charges

Cell or Tumor Lines	NCI/NIH Investigators & Fed. Govt. (MD campuses only)	Academia & Non-Profits both Domestic & International	Commercial Entities both Domestic & International	
Per Cryopreserved Vial	N/A	\$150.00	\$150.00	
NCI Anti-Cancer Cell Line Panel	N/A	\$9,000.00	\$8,250.00	

The complete NCI Anti-Cancer Cell Line Panel is comprised of 60 cell lines. Commercial entities may receive the five NCI-H lines only through a licensing agreement therefore the cost for the panel is adjusted to 55 lines for commercial recipients.

Yeast Strains	NCI/NIH Investigators & Fed. Govt. (MD campuses only)	Academia & Non-Profits both Domestic & International	Commercial Entities both Domestic & International	
One Strain	N/A	\$150.00	\$150.00	
Complete Set (16 strains)	N/A	\$2,400.00	\$2,400.00	

Electronic Funds Wire Transfer Information EFT/ACH Wires

JP Morgan New York, NY

ABA Number: 021000021

Account of: Charles River Laboratories Lock Box Account

DDA (Checking) Account Number: 799-761499

Swift Number: CHASUS33

ACH HELP DESK: (800)447-3593 WIRE HELP DESK: (866)223-0359

- JPM uses the same ABA Number for both wires and ACH Payments
- CTX format required to utilize EFT/ACH
- The full invoice amount is to be paid; any bank wire fees incurred are at the purchaser's expense.

National Cancer Institute

MATERIAL TRANSFER AGREEMENT-A Cell lines maintained in the NCI-DCTD Repository

This Material Transfer Agreement ("MTA") has been adopted for use by the National Cancer Institute ("NCI") for transfers of cell lines from the Division of Cancer Treatment and Diagnosis ("DCTD") Tumor Repository ("Research Material"). The DCTD Tumor Repository has maintained, since the early 1960's, a low temperature repository of transplantable tumor and tumor cell lines from various species. The Repository serves as a resource for experimental tumor lines from various species, many of which are not obtainable elsewhere. The Repository makes these Materials available as a service to the Research Community.

Recipient:	
Name of Recipient Investigator and Recipient Institution	
1. NCI agrees to transfer to Recipient named above the following Research Material:	
(use an attachment page if necessary)	
2. THIS RESEARCH MATERIAL MAY NOT BE USED IN HUMAN SUBJECTS. The Research Material will only be used for research purposes by Recipient's investigator in his/her laboratory, for the research project described below, under suitable containment conditions. This Research Material will need for commercial purposes such as production or sale. Recipient agrees to comply with all Federal reand regulations applicable to the Research Project and the handling of the Research Material. These same are being provided in a manner that does not allow for direct identifiable patient information to the Recipient, and therefore do not constitute Human Subject Research as defined in 45 CFR Part 46, "Protection of Human Subjects".	ot be ules
3. This Research Material will be used by Recipient's investigator solely in connection with the following research project ("Research Project") described with specificity as follows (use an attachment page if necessary):	
 and regulations applicable to the Research Project and the handling of the Research Material. These san are being provided in a manner that does not allow for direct identifiable patient information to the Recipient, and therefore do not constitute Human Subject Research as defined in 45 CFR Part 46, "Protection of Human Subjects". 3. This Research Material will be used by Recipient's investigator solely in connection with the following research project ("Research Project") described with specificity as follows (use an attachment page if 	mples

4. In all oral presentations or written publications concerning the Research Project, Recipient will acknowledge NCI's contribution of this Research Material unless requested otherwise. To the extent permitted by law, Recipient agrees to treat in confidence, for a period of three (3) years from the date of its disclosure, any of NCI's written information about this Research Material that is stamped "CONFIDENTIAL," except for information that was previously known to Recipient or that is or becomes publicly available or which is disclosed to Recipient without a confidentiality obligation. Any oral disclosures from NCI to Recipient shall be identified as being CONFIDENTIAL by notice delivered to Recipient within ten (10) days after the date of the oral disclosure. Recipient may publish or otherwise publicly disclose the results of the Research Project, but if NCI has given CONFIDENTIAL information to Recipient such public disclosure may be made only after NCI has had thirty (30) days to review the proposed disclosure to determine if it includes any CONFIDENTIAL information, except when a shortened time period under court order or the Freedom of Information Act pertains.

- 5. This Research Material represents a significant investment on the part of NCI. Recipient's investigator therefore agrees to retain control over this Research Material and further agrees not to transfer the Research Material to other people not under her or his direct supervision without advance written approval of NCI. NCI reserves the right to distribute the Research Material to others and to use it for its own purposes. When the Research Project is completed or three (3) years have elapsed, whichever occurs first, the Research Material will be disposed of as directed by NCI.
- 6. This Research Material is provided as a service to the research community. *IT IS BEING SUPPLIED TO RECIPIENT WITH NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.* NCI makes no representations that the use of the Research Material will not infringe any patent or proprietary rights of third parties.
- 7. Recipient may retain title to the patent rights in inventions made by its employees in the course of the Research Project. Recipient agrees not to claim, infer, or imply Governmental endorsement of the Research Project, the institution or personnel conducting the Research Project or any resulting product(s). Unless prohibited by law from doing so, recipient agrees to hold the United States Government harmless and to indemnify the Government for all liabilities, demands, damages, expenses and losses arising out of Recipient's use for any purpose of the Research Material.
- 8. The undersigned Recipient expressly certifies and affirms that the contents of any statements made herein are truthful and accurate.

of Columbi		cordance with Federal law as applied by the Federal courts in the Dist
Date:		
	Recipient Inves	igator's Signature and Title
Date:	_	
		nature and Title, for Recipient's Institution (Note-Authorized ne authority to bind the Institution to the terms of this agreement
Recipient's Ship	pping Address:	Billing Info (if different):
Phone:	Fax:	Email:

Melinda G. Hollingshead, D.V.M., Ph.D., Chief, BTB, DTP, DCTD, NCI, NIH

NCI's Mailing Address: Christine Pacula-Cox

BTB/DTP/DCTD/NCI/NIH, Box B

Authorized Signature for NCI:

Frederick, MD USA 21702

Phone: 301.846.1709 Email: paculac@mail.nih.gov

Procedures

Submission of Tumors for Cryopreservation

Investigators who have unique and novel experimental tumor lines and would like to submit their tumors to the Repository for cryopreservation and storage should write a letter of intent to the Project Officer. Upon acceptance, the Project Officer will inform the investigator in writing and provide shipping instructions. Tumor tissues or cells (frozen or ambient) are preferred over tumor-bearing animals.

At the Repository, the tumor line(s) will be tested for viral (see list below) and bacterial contamination. When proven "clean," the line(s) will be expanded, *in vivo* or *in vitro* as appropriate, for large batch cryopreservation. Viability and growth of the frozen tumors will be evaluated. The tumors will be included in the Repository's inventory, and upon joint approval of the submitting investigator and the Project Officer, they will be made available for distribution to the scientific community.

The viruses tested for are as follows (MAP test): pneumonia virus of mice (PVM), reo virus-type 3 (Reo 3), Murine encephalitis (GD VII), polyoma (Poly), Sendia virus (SEN), mouse pox extromelia (ECT), lactic dehydrogenase virus (LDH), Hantaan Virus (HAN), minute virus of mice (MVM), Mouse Hepatitis Virus (MHV) and lymphocytic choriomeningitis (LCMV).

Freezing Procedure

Aseptically harvested ascites tumors are diluted in freezing medium at a concentration of 10^6 - 10^7 cells per ml. One ml of the suspension is pipetted into each 2 ml vial (Nunc cryotube). The vials are screw-capped tightly and labeled with a Repository number. Tissue culture cells are prepared in a similar manner. For solid tumors, the aseptically excised tumor tissue is cut into 2x2x2 mm fragments after freeing it of necrotic materials. The fragments are placed in vials containing 1.5 ml of freezing medium. The freezing medium consists of appropriate tissue culture growth medium plus 10% DMSO and 10% fetal bovine serum.

The processed tumors are frozen initially in a controlled slow-rate freezing apparatus at the rate of 0.5°C per minute to -20°C and 1°C per minute to -80°C. The frozen vials are stored in liquid nitrogen freezers in the Repository.

Receiving Tumor Line Shipments

Cell culture lines and transplantable tumors (distributed as frozen vials of tumor tissues or cell suspension) are shipped in dry ice. Each tumor shipment includes an information sheet showing, among other items, the proper tumor designation, cryopreserved date, *in vivo* host, etc.

Requested tumors are shipped two to three weeks after receipt of all completed paperwork. Shipments leave the Repository no later than Wednesday in order to reach their destinations on weekdays. Before the shipment leaves the Repository, the Recipient is notified by email or fax of the waybill number and carrier. The Recipient (or a representative) must be available to

Procedures

receive the shipment. An invoice for payment will follow and payment is due upon receipt. When vials are received, they should be cultured right away, expanded and frozen down.

Recommended Thawing Procedure

Frozen tumor cells or tissues received from the Repository should be kept frozen at -70°C or lower until ready for use. For prolonged storage (more than two days), liquid nitrogen freezers are recommended.

<u>CAUTION:</u> We strongly recommend wearing protective glasses or face shields when thawing tissues in glass vials.

The vials in which the cell lines are stored are reliable; however, they are very susceptible to contamination if thawed in a contaminated water bath. The following procedures are recommended:

Remove the ampule from the dry ice container and place it directly into a 37-40°C water bath of freshly drawn water containing an effective concentration of disinfectant and agitate vigorously. Thawing should be rapid (within 40-60 seconds). As soon as thawing is complete, remove the ampule from the water bath and immerse in 70% ethanol at room temperature. All of the operations from this point should be carried out under strict aseptic conditions in a sterile room, cubicle or hood. The concentration of DMSO (cryoprotectant) is not toxic for transplantable tumors and implantation may be made directly from the vial. IMPLANT IMMEDIATELY AFTER THAWING.

For tissue culture samples, the DMSO must be diluted. Transfer the thawed contents (1 ml) to a centrifuge tube and add media to total at least 10 ml. Centrifuge the diluted suspension at approximately 125xg for 10 minutes, discard the supernatant, and re-suspend the cells in an appropriate volume of growth medium without DMSO. All of the cells then can be placed in a T25 or T75 flask with 5-10% FBS and RPMI 1640 with L-glutamine or the recommended cell culture medium, and incubated at the appropriate temperature and carbon dioxide level.

Each cell line must be passaged separately so as not to cross contaminate the lines. Slowly increase the cell split ratios avoiding over-dilution which can impede cell growth. Passage as needed seeking a split ratio which requires being passaged once or twice a week. All of the panel lines should perform well when recommended ratios/densities are used and quality media and serum and fresh L-glutamine are used. For cell lines that have 1:2 or 1:5 split ratios use a T25 flask to start. For cell lines that have 1:80 or 1:160 split ratios use a T75 flask to start.

Procedures

Tumor Transplantation

Transplantable tumor systems are experimental tools for investigators in scientific disciplines other than tumor biology or transplantation immunogenetics. We encourage investigators with limited transplantation experience to contact the Tumor Repository for more detailed information on techniques. The following notes may prove helpful:

- a. Tumors have characteristic lag times (the time lapse between tissue implantation and the first palpable growth), which vary from several days to several months with different tumor systems.
- b. Tumors also have characteristic rates of growth which markedly influence host survival, and which may vary from weeks to months with different tumor systems.
- c. The above two factors are significantly prolonged in the first, and sometimes the second, transplant generation's post-freeze and thaw.
- d. Histologically more complex tumors required two or three transplant generations, after thawing, before they return to normal histology and growth characteristics.

Mouse Tumors From The Jackson Laboratory

These tumors formerly were maintained and distributed by the Jackson Laboratory. The list of available tumors can be found in this catalog (refer to the Table of Contents for the page number). They were cryopreserved at EG&G Mason Research Institute and are distributed only as vials of frozen tumor tissue. The required host animals for carrying the JAX tumors in serial transplantation may be obtained from:

Animal Resources The Jackson Laboratory 600 Main Street, Bar Harbor, ME 04609 USA

T: 800.422.MICE or 207.288.5845 F: 207.288.6150



Tumor Designation	Histologic Type	General Information	Species and/or Strain of Transplantability
		BREAST	
COO-G	Mammary Carcinoma	Primary explant established <i>in vivo</i> in athymic nude mice by Dr. B. Giovanella, Stehlin Foundation	Nude Athymic Mice
DU4475 (fragment only)	Mammary Carcinoma	Primary explant from cutaneous tumor nodule in region of mastectomy established <i>in vitro</i> by Dr. A. J. Langlois, Duke University Medical Center; then adapted to <i>in vivo</i> transplantation by Dr. A. E. Bogden	Nude Athymic Mice
ELL-G	Mammary Carcinoma	Primary explant established <i>in vivo</i> in athymic nude mice by Dr. B. Giovanella, Stehlin Foundation	Nude Athymic Mice
HIG-G	Mammary Carcinoma	Primary explant established <i>in vivo</i> in athymic nude mice by Dr. B. Giovanella, Stehlin Foundation	Nude Athymic Mice
MCF/7	Mammary Carcinoma	Primary explant from pleural effusate established <i>in vitro</i> by Dr. H.D. Soule, Michigan Cancer Foundation; then adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice
MDA-MB-436	Mammary Carcinoma	Primary explant from pleural effusate established <i>in vitro</i> by Dr. Relda Cailleau, M.D. Anderson Hospital and Tumor Institute; then adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice
MX-1	Mammary Carcinoma	Primary xenotransplant from an infiltrating duct carcinoma (CLO-G). Adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice
SW-613	Mammary Carcinoma	Established from in vitro line	Nude Athymic Mice
VAN-G	Mammary Carcinoma	Primary explant established <i>in vivo</i> in athymic nude mice by Dr. B. Giovanella, Stehlin Foundation	Nude Athymic Mice

LUNG						
ASPS (fragment only)	Alveolar Soft Part Sarcoma	Obtained from Dr. Robert Shoemaker				
ASPS-1	Alveolar Soft Part Sarcoma	Lymph node Metastasis from Dave Vistica	NOD.SCID\NCr or Nude Athymic Mice			
LX-1 (fragment only)	Lung, undifferentiated carcinoma	Xenotransplant from a metastasis to subcutaneous tissue (DOY-G). The primary lung tumor was an oat cell carcinoma. Adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice			
COS-G	Lung, papillary carcinoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice			
H-MESO-1	Lung, mesothelioma	Xenotransplant from a primary tumor received from Dr. R.M. Williams and Dr. A. Rossini. Adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice			
H-MESO-1A	Lung, mesothelioma	H-MESO-1 converted to ascites form by Dr. A.E. Bogden	Nude Athymic Mice			
NCI-H23 H23	Lung, nonsmall cell, adenocarcinoma	Obtained from Dr. Adi Gazdar	Nude Athymic Mice			
NCI-H460 H460	Lung, nonsmall cell, epid.	Obtained from Dr. Adi Gazdar	Nude Athymic Mice			
		COLON				
CX-5	Colon, adenocarcinoma	Xenotransplant from an untreated metastasis (SQU-G) adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice			
GOB-G	Colon, adenocarcinoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice			
HCC-2998	Colorectal carcinoma	Obtained from Dr. I.J. Fidler	Nude Athymic Mice			
HCT-15	Colon, carcinoma	Established from in vitro line	Nude Athymic Mice			
KLO-G	Colon, adenocarcinoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice			
KM20L2	Colon, adenocarcinoma	Obtained from Dr. I.J. Fidler	Nude Athymic Mice			
MRI-H-194	Colon, adenocarcinoma	Xenotransplant from a metastasis adapted to in vivo transplantation by Dr. A.E. Bogden	Nude Athymic Mice			

LOVO I	Colon, adenocarcinoma	Established from in vitro line	Nude Athymic Mice	
LOVO II	Colon, adenocarcinoma	Established from in vitro line	Nude Athymic Mice	
MRI-H-250	Colon, carcinoma	Xenotransplant from a metastasis adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
		MELANOMA		
NIS-G	Melanosarcoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice	
TRI-G	Melanoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice	
WIL-G	Melanoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice	
MRI-H-121B	Melanoma, malignant	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
MRI-H-187	Melanoma, epithelioid melanotic	Xenotransplant from metastasis adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
MRI-H-221	Melanoma, malignant	Xenotransplant from metastasis adapted to <i>In vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
MRI-H-255	Melanoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
		CERVIX		
MRI-H-177	Cervix, squamous cell carcinoma	Xenotransplant from a metastasis adapted to <i>In vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
MRI-H-186	Cervix, invasive, large cell, nonkeratinizing squamous cell carcinoma	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
MRI-H-196	Cervix, poorly differentiated squamous cell carcinoma	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	
MRI-H-215	Cervix, invasive, large cell, nonkeratinizing, poorly differentiated, epidermoid carcinoma	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice	

KIDNEY					
MRI-H-121	Kidney, carcinoma	Xenotransplant from a metastasis adapted to <i>in vivo</i> transplant by Dr. A.E. Bogden	Nude Athymic Mice		
MRI-H-166	Kidney, transitional cell carcinoma	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice		
		ENDOMETRIUM			
MRI-H-147	Endometrium, carcinoma, Müllerian duct	Primary xenotransplant adapted <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice		
MRI-H-220	Endometrium, carcinoma	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. A.E. Bogden	Nude Athymic Mice		
		OVARY			
MRI-H-258	Ovarian Adenocarcinoma	Primary explant established <i>in vivo</i> by Dr. A.E. Bogden. Received from Dr. R. Hunter, University of Massachusetts Medical School	Nude Athymic Mice		
MRI-H-273	Ovarian Carcinoma	Originated from metastasis. Established <i>in vivo</i> by Dr. A.E. Bogden. Received from New England Deaconess Hospital	Nude Athymic Mice		
MRI-H-1834	Ovarian Carcinoma Primary explant established <i>in vivo</i> by Dr. A.E. Bogden. Received from Dr. R. Hunter, University of Massachusetts Medical School		Nude Athymic Mice		
SWA-G	Ovarian Carcinoma	Xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice		
		SARCOMA			
HS-1	Sarcoma	No historical information available	Conditioned Rats		
OGL-G	Sarcoma, spindle cell, periosteal osteogenic	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice		
DEL-G	Sarcoma	Primary xenotransplant adapted to <i>in vivo</i> transplantation by Dr. B. Giovanella	Nude Athymic Mice		
		EPIDERMOID			
DEAC-1	Mucoepidermoid carcinoma	Received as cryopreserved ampules from Dr. S. Warren and Dr. W.B. Patterson	Hamster Cheek Pouch		

CNS						
SF 295 (fragment)	Glioblastoma	Obtained from Dr. Rosenblum	Nude Athymic Mice			
	MISCELLANEOUS					
CWR-22	Prostate, adenocarcinoma	Received from Dr. T. Pretlow, in vivo cultivation requires	Nude Athymic Mice			
		testosterone supplementation. Not an in vitro cell line				
DAU	Burkitt's lymphoma	Received from Dr. T. Griffin, adapted to in vivo	Nude Athymic Mice			
		transplantation by Dr. A.E. Bogden				

Hamster Tumors

Species: Hamster

Tumor	Histologic Type	Form	Strain of Origin/Transplant	Comments
Designation	31			
Fibrosarcoma	Fibrosarcoma	Ascites	Not Specified	
H-12	Mesothelioma	Solid	Golden Syrian	
H-75	Mesothelioma	Solid	Golden Syrian	
Islet Cell	Pancreatic	Solid	Golden Syrian	
	Adenocarcinoma			
Lymphosarcoma	Lymphosarcoma	Ascites	Not Specified	
Melanoma	Melanotic	Solid	Not Specified	
	Melanoma			
NCI-CHOdeltafurin	Ovarian	Cell	Not Specified	NIH Licensed
Pan #1 (Fortner)	Pancreatic Duct	Solid	Not Specified	
	Adenocarcinoma			
SB #1 (Fortner)	Small Bowel	Solid	Not Specified	
	Adenocarcinoma			
TG1-4	Mesothelioma	Solid	Golden Syrian	
TS1-4	Epidermoid	Solid	Golden Syrian	
	Carcinoma			
10-24	Mesothelioma	Ascites	Golden Syrian	
2309V	Pancreatic Islet β	Solid	Golden Syrian	
	Cell			
	Adenocarcinoma			
4671	Pancreatic Duct	Solid	Golden Syrian	Line B is insulin-secreting
	Adenocarcinoma			
6973P	Leiomyosarcoma	Solid	Golden Syrian	
8721R	Renal Carcinoma	Solid	Golden Syrian	
9242	Parotic Acinar Cell	Solid	Golden Syrian	
	Adenocarcinoma			
10838	Seminoma	Solid	Golden Syrian	
11348P	Pulmonary	Solid	Golden Syrian	
	Squamous Cell			
	Carcinoma			
11963V	Leiomyosarcoma	Solid	Golden Syrian	
22047	Adenocarcinoma	Solid	Golden Syrian	

Mouse Tumors

Three Addenda have been inserted in this section to facilitate identification or selection of mouse tumors by **histologic type** (Addendum A) and by mouse strain (Addendum B). The third (Addendum C) is a list of other models together with treatment information. A fourth Addendum provides additional treatment information for cell lines received from Southern Research Institute and Arthur D. Little, Inc..

ADDENDUM A: Mouse Tumors Listed by Histological Type*

ADRENAL

AT LAF₁

ANAPLASTIC CARCINOMA

dbrB (Jax)

COLON

CA07/A CA51 Colon 26 Colon 38

FIBROSARCOMA

36257 TTT Hepatoma 129

38290 TTT Hepatoma 134

46362 TTT

46363 TTT

FB SAR SaD2 (Jax)

GLIOMA

Glioma 261

HEMANGIOENDOTHELIOMA

36230 TLT 42052 TST 42076 TST 44347 TST

HEPATOMA

H6 (Jax) Hepatoma 129 Hepatoma 134

HYRIDOMA

4G11

INGUINAL

Krebs Ascites Krebs-2

LEUKEMIAS

C58/J Spont. E Male/Gross

Gross L1210 L4946 P288 P388 P815 P1534 P1798 RBL-n

LUNG

C4461 CAD2 LC-12

LL-LUC-POL2

LYMPHONA &

LYMPHOSARCOMA

BL12 EL-4 Male L18464 LSTRA Mecca 6C3HED

MAMMARY

Adenocarcinoma 755 CE1460 MACA

CH

C3HBA (Jax) DBA/2 Spont. M114

Ehrlich Ascites

EMT-6 Gross H2712 (Jax) Klein MA13C MAMMARY (CONT)

MC-<u>n</u> MCS-1 MXT

Spont. DBA/2

MELANOMA

B16

NERVOUS SYSTEM

C1300 (Jax) Zimmerman-

Ependymoblastoma

Glioma

OSTEOGENIC

HE10734

PANCREAS

PAN 02

PITUITARY

A+T

BW8685 (Jax) BW8883 (Jax) T+T #15 T+T #97

PLASMACYTOMA

ADJ-PC-<u>n</u> LPC-1 MOPC-<u>n</u> MPC-<u>n</u> RPC-<u>n</u> YPC-1 70429

91632

RETICULUM CELL

Friend Virus Leukemia M5076 SJL/JW

SARCOMA

Lewis MA387 METH-A MS-2 S37 S180 Sa-1 (Jax)

SQUAMOUS

LC-12

TESTICULAR

M5480

TERATOSARCOMA

LS402AX

THYMUS

Reif-Allen

*Refer to Inventory for details. A designation followed by <u>n</u>, e.g., MOPC-<u>n</u>, indicates that there is a series of tumors with this main designation, e.g., MOPC-4, MOPC-17, MOPC-21, etc.

ADENDUM B: Mouse Tumors Listed By Host Strain* INBREAD HOSTS

A/HE

C4461

Hauschka Ascites

Klein (TA3)

<u>A/J</u>

C1300 (Jax)

H6 (Jax)

Sa 1 (Jax)

<u>AKR</u>

L4946

MA387

Mecca

Reif-Allen

BALB/c

ADJ-PC-n

CA07/A

CA51

Colon 26

EMT-6

LC-12

LU-12

LPC-1

LSTRA

MC-n

METH-A

Moloney Sarcoma

MOPC-n

MPC-n

MS-1

MS-2

P1798

RPC-n

S37

YPC-1

1247

36257 TTT

38290 TTT

44316 LTST

44347 TST

4G11

46363 TTT

<u>CE</u>

CE1460 MACA

C3H

C3HBA (Jax)

FB SAR

Gross Leukemia

H2712 (Jax)

HE 10734

Hepatoma 129

Hepatoma 134

J30237

Krebs Ascites Carcinoma

Krebs 2 Carcinoma

MA 13C

Mecca

X5563

6C3HED

70429

C57BL/6

Adenocarcinoma 755

B16

BL12

Colon 38

EL-4

E Male Gross

Glioma 261

L18464

Lewis Sarcoma T241

LL-LUC-POL2

LS402AX

M5076

M5480

PAN 02

RBL-<u>n</u>

T+T #15

42052 TST

42076 TST

46362 TTT

916

C57L/J

BW8883 (Jax)

C57BR/cdJ

BW8685 (Jax)

C58

C58J/Spont.

DBA/1

CaD1 (Jax)

dbrB (Jax)

S37 (Jax)

S91 (Jax)

T1703 (Jax)

DBA/2

CAD2

DBA/2 Spont. M114

Friend Virus Leukemia

Gr. Mam. Adenocarcinoma

L1210

P288

P329

F 329

P388

P815

P1534

S180

SaD2 (Jax)

Spont. DBA/2 Mammary

T1699 (Jax)

SJL/J

SJL/JW

129

LS402AX

F1 HYBRIDS AND NON-INBRED HOSTS

Swiss

Ehrlich Ascites

S180

BDF₁

MXT

Various resistant lines of L1210 and P388

<u>LAF</u>₁

AT LAF₁ MST T+T #97 CAF₁

Lymphoma-2

CDF₁

R-<u>n</u>

Various resistant lines of L1210 and P388

^{*}Refer to Inventory for details. A designation followed by <u>n</u>, e.g., MOPC-<u>n</u>, indicates that there is a series of tumors with this main designation, e.g., MOPC-4, MOPC-17, MOPC-21, etc.

ADDENDUM C: Other Murine Models

L1210 LYMPHOID LEUKEMIA

L1210/TSC (NSC-729) L1210/MTX (NSC-740)

L1210/6MP (NSC 755)

L1210/L-PAM (NSC-8806)

L1210/NSC-19622

L1210/5FU (NSC-19893)

L1210/CTX (NSC-26271)

L1210/DF8 (NSC-29630) L1210/HU (NSC-32065)

L1210/MeGAG (NSC-32946)

L1210/NSC-38280

L1210/DTIC (NSC-45388)

L1210/TIC (NSC-60339)

L1210/Ara-C (NSC-63878)

L1210/cis-DDP (NSC-119875)

L1210/Anhydro Ara C (NSC-145668)

L1210/Ftorafur (NSC-148958)

L1210/L-Alanosine (NSC-153353)

Note: Reo3+

L1210/BCNU (NSC-409962)

L1210/C95 (NSC-740, 755, 26271)

L1210/FR3 DCM/R 100a

L1210/FR8/DCM

L1210/RT8 (Folate Reductase)

L1210/M-773

P388 LYMPHOCYTIC LEUKEMIA

P388/MTX (NSC-740)

P388/Actinomycin D (NSC-3053)

P388/DON (NSC-7365)

P388/L-PAM (NSC-8806)

P388/5-FU (NSC-19893)

P388/Ara C (NSC-63878)

P388/Daunomycin (NSC-82151)

P388/5-Azacytidine (NSC-102816)

P388/DDP (NSC-119875) Note: Reo3*

P388/ADR (NSC-123127)

P388/L-Alanosine (NSC-153353)

P388/Acivicin (NSC-163501)

P388/Anthracenedione (NSC-287513)

Note: Reo3*

P388/Mitoxantrone (NSC-299195 + 301739)

P388/Ara-A + 2'dcF (NSC-404241 + 218321)

P388/BCNU (NSC-409962)

OTHER RESISTANT LEUKEMIAS

P288/MTX (NSC-740) P815/VLB (NSC-49842)

LEWIS LUNG CARCINOMA ONLY IN MICE

LLC-Luc-GFP (LL-LUC-POL2)

^{*}Treatment information, where available, is given in the following pages. When resistant lines are shipped, treatment information, if any, is included.

ADDENDUM D: Drug-Resistant Murine Leukemias-

TREATMENT INFORMATION FOR LINES RECEIVED FROM SOUTHERN RESEARCH INSTITUTE AND ARTHUR D. LITTLE, INC.

Tumor	Host of Origin, Resistant Ln	Passage Inoculum	Treatment Used w/ Serial Passage			•	Treatme of Resist		Check	
Line	Resistant Lii	moculum	NSC#	mg/Kg	Rt	Schedule	NSC#	mg/Kg	Rt	Schedule
L1210/TSC (NSC-729)	DBA/2 or CDF1	10 ⁵	729	5.0	i.p.	Days 1-6	729	6.0	i.p.	Q3H x 8 Days 1,5, 9
L1210/6-MP (NSC-755)	DBA/2	10 ⁵			NONE		755	50.0	i.p.	QD1 9 days
L1210/L-PAM (NSC-8806)	BDF1	10 ⁵	8806	7.5	i.p.	Day 2 only	8806	15.0	i.p.	Day 1 only
L1210/CPA (L1210/CTX) (NSC-26271	DBA/2	10 ⁵		NONE			26271	265.0	i.p.	Day 1 only
L1210/HU (NSC-32065)	DBA/2 or CDF1	10 ⁵	32065	130.0	i.p.	Days 1-6	32065	60.0	i.p.	Q3Hx8 Days 1, 5, 9
L1210/ARA-C (NSC-63878)	DBA/2 or hybrid	10 ⁵		NONE			135962	125.0	i.p.	Day 1 only
L1210/DDP (NSC-119875)	DBA/2 or CDF1	10 ⁵	119875	5.0	i.p.	Day 4 only	119875	8.0	i.p.	Day 1 only
L1210/BCNU (NSC-409962)	BDF1	10 ⁵			NONE		409962	30.0	i.p.	Day 1 only
P388/MTX (NSC-740)	DBA/2 or CDF1	10 ⁷	740	0.75	S.C.	Days 1-6	740	2.0	i.p.	QD1 9 days
P388/ACT-D (NSC-3053	DBA/2 or CDF1	10 ⁷	3053	0.2	i.p.	Day 4 only	3053	0.5	i.p.	Day 1 only
P388/L-PAM (NSC-8806)	BDF1	10 ⁶	8806	7.5	i.p.	Day 2 only	8806	15.0	i.p.	Day 1 only
P388/5-FU (NSC-19893)	BDF1	10 ⁷	19893	20.0	S.C.	Days 1-6	19893	25.0	i.p.	QD1 9 days
P388/AZACYT (NSC-102816)	DBA/2 or CDF1	10 ⁷	102816	40.0	i.p.	Day 4 only	102816	3.5	i.p.	QD1 9 days
P388/ADR (NSC-123127)	BDF1	10 ⁷	123127	6.0	i.p.	Day 2 only	123127	12.5	i.p.	Day 1 only

Tumor	Host of Origin,	Passage	Treatment Used w/ Serial Passage				Optimal Treatments to Check Degree of Resistance			
Line	Resistant Ln	Inoculum	NSC#	mg/Kg	Rt	Schedule	NSC#	mg/Kg	Rt	Schedule
P388/ARA-A + 2'dcF (NSC-404241+ NSC-218321	BDF1	10 ⁵	414241 + 218321	125.0 0.02	i.p.	Days 2-4	404241 + 218321	60.0 0.05	i.p.	Q3Hx8 Days 1, 5, 9
P388/ARA-A + 2'dcF (NSC-404241+ NSC-218321	BDF1	10 ⁵	414241 + 218321	125.0 0.02	i.p.	Days 2-4	404241 + 218321	150.0 0.25	i.p.	QD1 9 days
P388/BCNU (NSC-409962)	CDF1	10 ⁷	409962	25.0	i.p.	Day 2 only	409962	30.0	i.p.	Day 1 only

⁺NSC-218321 was administered thirty minutes before NSC-404241 each time.

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
1247	Mammary Adenocarcinoma	Solid	BALB/c	
36230 TLT	Hemangioendothelioma	Solid	C57BL/6J	
36257 TTT	Fibrosarcoma	Solid	BALB/cAnN	
38290 TTT	Fibrosarcoma	Solid	BALB/cAnN	
42052 TST	Hemangioendothelioma	Solid	C57BL/6J	
42076 TST	Hemangioendothelioma	Solid	C57BL/6J	
44316 LTST	Hemangioendothelioma	Solid	BALB/cAnN	
44347 TST	Hemangioendothelioma	Solid	BALB/cAnN	
46362 TTT	Fibrosarcoma	Solid	C57BL/6J	
46363 TTT	Fibrosarcoma	Solid	BALB/cAnN	
4G11	Hybridoma	Brei	BALB/cAnN	RPMI/10% FCS, Nissely
6C3HED (Gardner)	Lymphosarcoma	Ascites	C3H	Several lines. See Jax tumors
6C3HED/AR Res.	Lymphosarcoma	Spleen Homogenate	СЗН	
70429	Plasmacytoma	Ascites	C3H	
70429/Azaserine (NSC-3425)	Plasmacytoma	Ascites	C3HF/LW	
91632	Reticulum Cell Sarcoma	Solid	C57BL/Kaplan	
Adenocarcinoma 755 (CA755, Bagg-Jackson, Adenocarcinoma)	Mammary Adenocarcinoma	Solid, Ascites or Brei	C57BL	
Adenocarcinoma 755	Mammary Adenocarcinoma	Solid	SCID	
ADJ-PC-6	Plasmacytoma	Solid or Ascites	BALB/c	
ASPS	Alveolar Soft Part Sarcoma	Solid	NOD.SCID	
AT (Clone Y ₁)	Adrenal	Solid	LAF ₁	
AtT/20	Anterior Pituitary	Solid	LAF ₁	
B16	Melanoma	Solid	C57BL/6	See Jax tumors
B 12 Sensitive	Lymphosarcoma	Solid	C57BL/Ka	
BL 12/HcRa	Lymphosarcoma	Solid	C57BL/Ka	Resistant to cortisone
BW8685	Pituitary	Solid	C57BR/Cdj	See Jax tumors
BW8883	Pituitary	Solid	C57L/J	See Jax tumors
СЗНВА	Mammary Adenocarcinoma	Solid	C3H/An	See Jax tumors
C4461	Lung Adenocarcinoma	Solid	A/He	

	T			
Tumor Designation	Histologic Type	Form	Strain of	Comments
			Origin/Transplant	
C58/J Spontaneous	Leukemia	Spleen Brei	C58	
CA07/A	Colon Adenocarcinoma	Solid	BALB/c	
CA51	Colon Adenocarcinoma	Solid	BALB/c	
CaD1	Mammary Adenocarcinoma	Solid	DBA/1J	See Jax tumors
CaD2	Mammary Adenocarcinoma	Solid	DBA/2	
CCO/1923	Hemangiosarcoma	Solid	B6C3F1	
CE1460 MACA	Mammary Adenocarcinoma	Solid	CE	
CH	Mammary Adenocarcinoma	Solid	Nude C3H	
Colon 26	Carcinoma	Solid	BALB/c	
Colon 38	Carcinoma	Brei	C57BL/6	
DBA/2 Spontaneous Tumor	Mammary Adapagarainama	Solid	DBA/2	
M114	Mammary Adenocarcinoma			
dbrB	Anaplastic Carcinoma	Solid	DBA/1J	See Jax tumors
Ehrlich Ascites	Mammary Adenocarcinoma	Solid or Ascites	Various	Several lines
Ehrlich Ascites/6-TG	Mammary Adenocarcinoma	Ascites	Swiss	Resistant to 6-Thioguanine
(NSC-752)	<u> </u>			Tresistant to 0-11110guarinie
Ehrlich Ascites, Tetraploid	Mammary Adenocarcinoma	Ascites	Swiss	
		Solid, Spleen		
EL-4 Male	Lymphoma	Fragments &	C57BL/6	
		Ascites		
E Male Gross	Leukemia	Spleen	C57BL/6	Available to NCI-Frederick only
		Homogenate		Available to IVOI I redefice only
EMT-6	Mammary Adenocarcinoma	Solid	BALB/c	
FB SAR (A)	Fibrosarcoma	Solid	C3H	
FB SAR (B)	Fibrosarcoma	Solid	C3H	
Friend Virus Leukemia	Reticulum Cell Sarcoma	Solid or Spleen	DBA/2	
	redicardin con carconia	Homogenate	55/42	
Furth Tumor		_		See Carcinoma 1025
Glioma 261	Glioma	Solid	C57BL/6	
Gross Leukemia	Leukemia	Solid	C3H	
Gross Mammary	Mammary Adenocarcinoma	Solid	DBA/2	
Adenocarcinoma				
Hageman Mastocytoma				See P815

	1	T	0.1	T
Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
Hauschka Ascites	Unknown	Ascites	A/He	
H2712	Mammary Adenocarcinoma	Solid	C3H/HeJ	See Jax tumors
H6	Hepatoma	Solid	A/J	See Jax tumors
HE 10734	Osteogenic Sarcoma	Solid	C3H	
HE 10734/FR	Osteogenic Sarcoma	Solid	C3H	
Hepatoma 129 (HE 129)	Hepatoma	Solid	C3H or Hybrid	
Hepatoma 134 (HE 134, Shear Hepatoma 134)	Hepatoma	Ascites	СЗН	
J-30237	Unknown	Ascites	C3H	
Klein Tumor (TA3)	Mammary Adenocarcinoma	Ascites	A/He or CAF ₁	Several lines
Krebs Ascites Carcinoma	Carcinoma of Inguinal Region	Ascites	C3H or CDBA	
Krebs 2 Carcinoma	Carcinoma of Inguinal Region	Ascites	СЗН	
L1210	Lymphoid Leukemia	Ascites or Spleen Homogenate	DBA/2 or CDBA	
L1210/TSC (NSC-729)	Lymphoid Leukemia	Ascites	DBA/2	Resistant to Thiosemicarbazone
L1210/MTX (NSC-740)	Lymphoid Leukemia	Ascites or Speen Homogenate	DBA/2 or CDBA	Treated
L1210/6MP (NSC-755)	Lymphoid Leukemia	Ascites	DBA or Hybrid	Several lines
L1210/L-PAM (NSC-8806)	Lymphoid Leukemia	Ascites	DBA/2 or BDF ₁	Treated
L1210/NSC-19622	Lymphoid Leukemia	Ascites	DBA/2	
L1210/5FU (NSC-19893)	Lymphoid Leukemia	Ascites	BDF ₁	
L1210/CTX (NSC-26271) (L1210/CPA)	Lymphoid Leukemia	Ascites or Spleen Homogenate	DBA/2 or CDBA	
L1210/DF8 (NSC-29630)	Lymphoid Leukemia	Ascites or Spleen Homogenate	DBA/2 or CDBA	
L1210/HU (NSC-32946	Lymphoid Leukemia	Ascites	DBA/2	
L1210/MeGAG (NSC-32946)	Lymphoid Leukemia	Ascites or Spleen Homogenate	CDF ₁	
L1210/NSC-38280	Lymphoid Leukemia	Ascites	CDF ₁	
L1210/DTIC (NSC-45388)	Lymphoid Leukemia	Ascites or Solid	DBA/2 or CDBA	Untreated and treated lines

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
L1210/TIC (NSC-60339)	Lymphoid Leukemia	Spleen Homogenate	CDBA	Untreated and treated lines
L1210/Ara-C (NSC-63878)	Lymphoid Leukemia	Ascites or Spleen Homogenate	DBA/2 or Hybrid	Untreated and treated lines
L1210/cis-DDP (NSC-119875	Lymphoid Leukemia	Ascites	DBA/2	Treated
L1210/Anhydro-Ara C	Lymphoid Leukemia	Ascites	DBA/2 or Hybrid	Untreated and treated lines
L1210/Ftorafur (NSC-148958)	Lymphoid Leukemia	Ascites	DBA/2 or BDF ₁	Untreated and treated lines
L1210/BCNU (NSC-409962)	Lymphoid Leukemia	Ascites	DBA/2 or Hybrid	Untreated and treated lines
L1210/C95/RES	Lymphoid Leukemia	Ascites or Spleen Brei	CDBA	CTX, MTX, MP resistant
L1210/FR3 DCM/R 100a	Lymphoid Leukemia	Spleen Brei	CDBA	
L1210/FR8/DCM	Lymphoid Leukemia	Spleen Brei	CDF ₁	
L1210/FR8 (Folate Reductase)	Lymphoid Leukemia	Spleen Brei	CDF ₁	
L1210/M-733	Lymphoid Leukemia	Ascites	DBA/2	Treated
L1210 Variants				See PR ₁ C ₁ T5/NSC-45388, PR ₁ SE ₁ T5 and PR ₁ SE ₁ T5/NSC-45388
L18464	Lymphoma	Solid	C57BL/6	
L4946	Lymphocytic Leukemia	Solid	AKR	
LAF ₁	Adrenal Cortical Adenocarcinoma	Solid	LAF ₁ /J	
LC-12	Pulmonary Squamous Cell Carcinoma	Solid	BALB/c	
LL-LUC-POL2 (LLC-LUC-GFP)	Lung Squamous Cell Carcinoma	Solid	C57BL/6	Grown in mice only, never in tissue culture. Genetically modified to express luciferase.
Lewis Lung/PALA (NSC-224131)	Carcinoma	Solid	C57BL/6	
Lewis Sarcoma T241	Pleiomorphic Cell Sarcoma	Solid	C57BL	
LPC-1	Plasmacytoma	Solid or Ascites	BALB/c	

	T	I		
Tumor Designation	Histologic Type	Form	Strain of	Comments
	31		Origin/Transplant	
LS402AX	Teratosarcoma	Solid	C57BL/6 and 129	
LSTRA	Lymphosarcoma	Ascites	BALB/c	Several lines
LSTRA/DTIC (NSC-45388)	Lymphosarcoma	Ascites	BALB/c	Untreated and treated lines
M5076	Reticulum Cell Sarcoma	Solid or Ascites	C57BL/6	
M5076/L-PAM (NSC-8806)	Reticulum Cell Sarcoma	Solid	C57BL/6	Treated
M5076/HMM (NSC-13875)	Reticulum Cell Sarcoma	Solid	C57BL/6	Treated
M5076/cis-DDP (NSC-119875)	Reticulum Cell Sarcoma	Solid	C57BL/6	Treated
M5480	Testicular Carcinoma (Seminoma)	Solid	C57BL/6	
MA13C	Mammary Adenocarcinoma	Solid	C3H	
MA387	Fusiform Cell Carcinoma	Solid	AKR	
MC-11	Mammary Adenocarcinoma	Spleen Homogenate	BALB/c	
MC-5	Mammary Adenocarcinoma	Spleen	BALB/c	
MC-6 Female	Mammary Adenocarcinoma	Ascites	BALB/c	
MCS-1	Mammary Adenocarcinoma	Solid or Spleen Homogenate	BALB/c	
Mecca (ME61, MLS)	Lymphosarcoma	Solid or Ascites	C2H or AKR	
METH-A	Sarcoma	Ascites	BALB/c	
MLS				See Mecca
Moloney Sarcoma (SV-122-TR4)	Sarcoma	Solid	BALB/c	
MOPC-104	Plasmacytoma	Solid	BALB/c	
MOPC-112	Plasmacytoma	Solid	BALB/c	
MOPC-113	Plasmacytoma	Solid	BALB/c	
MOPC-114	Plasmacytoma	Solid	BALB/c	
MOPC-116	Plasmacytoma	Solid	BALB/c	
MOPC-118	Plasmacytoma	Solid	BALB/c	
MOPC-121	Plasmacytoma	Solid	BALB/c	
MOPC-123	Plasmacytoma	Solid	BALB/c	
MOPC-129	Plasmacytoma	Solid	BALB/c	
MOPC-132	Plasmacytoma	Solid	BALB/c	

- -			Strain of	
Tumor Designation	Histologic Type	Form	Origin/Transplant	Comments
MOPC-140	Plasmacytoma	Solid	BALB/c	
MOPC-141	Plasmacytoma	Solid	BALB/c	
MOPC-157	Plasmacytoma	Solid	BALB/c	
MOPC-17	Plasmacytoma	Solid	BALB/c	
MOPC-172	Plasmacytoma	Solid	BALB/c	
MOPC-173	Plasmacytoma	Solid	BALB/c	
MOPC-209	Plasmacytoma	Solid	BALB/c	
MOPC-21	Plasmacytoma	Solid or Ascites	BALB/c	
MOPC-28	Plasmacytoma	Solid	BALB/c	
MOPC-30	Plasmacytoma	Solid	BALB/c	
MOPC-31	Plasmacytoma	Solid	BALB/c	
MOPC-4	Plasmacytoma	Solid or Ascites	BALB/c	
MOPC-41	Plasmacytoma	Solid	BALB/c	
MOPC-46	Plasmacytoma	Solid	BALB/c	
MOPC-47	Plasmacytoma	Solid	BALB/c	
MOPC-48	Plasmacytoma	Solid	BALB/c	
MOPC-49	Plasmacytoma	Solid	BALB/c	
MOPC-51	Plasmacytoma	Solid	BALB/c	
MOPC-61	Plasmacytoma	Solid	BALB/c	
MOPC-63	Plasmacytoma	Solid	BALB/c	
MOPC-67	Plasmacytoma	Solid	BALB/c	
MOPC-69	Plasmacytoma	Solid	BALB/c	
MOPC-70	Plasmacytoma	Solid	BALB/c	
MOPC-78	Plasmacytoma	Solid	BALB/c	
MOPC-88	Plasmacytoma	Solid	BALB/c	
MOPC-91	Plasmacytoma	Spleen Homogenate	BALB/c	
MOPC-96	Plasmacytoma	Solid	BALB/c	
MOPC-99	Plasmacytoma	Solid	BALB/c	
MPC-1	Plasmacytoma	Solid or Ascites	BALB/c	
MPC-15	Plasmacytoma	Solid	BALB/c	
MPC-2	Plasmacytoma	Solid or Ascites	BALB/c	
MPC-25	Plasmacytoma	Solid	BALB/c	

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
MPC-26	Plasmacytoma	Solid	BALB/c	
MPC-31	Plasmacytoma	Solid	BALB/c	
MPC-36	Plasmacytoma	Solid	BALB/c	
MPC-37	Plasmacytoma	Solid	BALB/c	
MPC-40	Plasmacytoma	Solid	BALB/c	
MPC-42	Plasmacytoma	Solid	BALB/c	
MPC-44	Plasmacytoma	Solid or Ascites	BALB/c	
MPC-48	Plasmacytoma	Solid	BALB/c	
MPC-49	Plasmacytoma	Solid	BALB/c	
MPC-59	Plasmacytoma	Solid	BALB/c	
MPC-60	Plasmacytoma	Solid	BALB/c	
MPC-63	Plasmacytoma	Solid	BALB/c	
MPC-64	Plasmacytoma	Solid	BALB/c	
MPC-67	Plasmacytoma	Solid	BALB/c	
MPC-73	Plasmacytoma	Solid	BALB/c	
MPC-H	Plasmacytoma	Solid	BALB/c	
MST	Mast Cell	Solid	LAF ₁	
MS-2	Sarcoma	Solid	BALB/c	
MXT	Mammary Ductal Papillary Carcinoma	Solid	BDF ₁	Estrogen Responsive
P288	Lymphocytic Leukemia	Solid or Ascites	DBA/2 or CDBA	
P288/MTX (NSC-740)	Lymphocytic Leukemia	Ascites	DBA/2 or BDF ₁	
P388	Lymphocytic Leukemia	Ascites	DBA/2 or CDBA	
P388/MTX (NSC-740)	Lymphocytic Leukemia	Ascites	DBA/2	Treated
P388/Actinomycin D (NSC-3053)	Lymphocytic Leukemia	Ascites	DBA/2	
P388/DON (NSC-7365)	Lymphocytic Leukemia	Ascites	DBA/2	Treated
P388/L-PAM (NSC-8806)	Lymphocytic Leukemia	Ascites	BDF ₁	Treated
P388/5FU (NSC-19893	Lymphocytic Leukemia	Ascites	BDF ₁	Treated
P388/Ara-C (NSC-63878)	Lymphocytic Leukemia	Ascites	BDF ₁	
P388/Daunomycin (NSC-82151)	Lymphocytic Leukemia	Ascites	DBA/2	

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
P388/5-Azacytidine (NSC-102816)	Lymphocytic Leukemia	Ascites	DBA/2	Treated
P388/ADR (NSC-123127)	Lymphocytic Leukemia	Ascites	BDF ₁	Treated
P388/L-Alanosine (NSC-153353)	Lymphocytic Leukemia	Ascites	DBA/2	
P388/Acivicin (NSC-163501)	Lymphocytic Leukemia	Ascites	DBA/2	
P388/Mitoxantrone (NSC-301739)	Lymphocytic Leukemia	Ascites	DBA/2	
P388/Ara-A +2'dcF (NSC-404241 + NSC- 218321)	Lymphocytic Leukemia	Ascites	BDF₁	Treated
P388/BCNU (NSC-409962)	Lymphocytic Leukemia	Ascites	BDF ₁	Treated
P815 (Hageman Mastocytoma)	Mast Cell Leukemia	Ascites	DBA/2 or Hybrid	
P815/VLB (NSC-49842)	Mast Cell Leukemia	Ascites	DBA/2 or BDF ₁	
P1534	Lymphocytic Leukemia	Spleen Homogenate or Ascites	DBA/2	Several lines
P1798	Lymphosarcoma	Solid or Ascites	BALB/c	
P1798/CR-JS	Lymphoma	Solid	BALB/c	Glucocorticoid resistant, treated
P1798/CS-JS	Lymphoma	Solid	BALB/c	Glucocorticoid sensitive
PAN 02	Pancreas	Solid	C57BL/6	
PR₁C₁T5/NSC-45388	Lymphoid Leukemia	Ascites	CDF ₁	L1210 variant; treated
PR₁SE₁T5	Lymphoid Leukemia	Ascites	CDF ₁	L1210 variant
PR ₁ SE ₁ T5/NSC-45388	Lymphoid Leukemia	Ascites Homogenate	CDF ₁	L1210 variant; treated
R-26	Unknown	Ascites	CDF ₁	
R-46	Unknown	Ascites	CDF ₁	
R-53	Unknown	Ascites	CDF ₁	
R-74	Unknown	Ascites	CDF ₁	

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
RBL-5 (Rauscher Virus Induced Transplantable Tumor-5)	Leukemia	Ascites	C57BL/6	
Reif-Allen Tumor	Thymoma	Ascites	AKR	
RPC-20	Plasmacytoma	Solid or Ascites	BALB/c	
RPC-5	Plasmacytoma	Solid	BALB/c	
RPC-9	Plasmacytoma	Solid or Ascites	BALB/c	
S180 (Crocker, S III)	Pleomorphic Cell Sarcoma	Solid or Ascites	BALB/c, Swiss or hybrids	See Jax tumors
S37	Pleomorphic Cell Sarcoma	Ascites	BALB/c, Nonspecific	See Jax tumors
Sa 1	Spindle Cell Sarcoma	Solid	A/J	See Jax tumors
Sa D2	Fibrosarcoma	Solid	DBA/2J	See Jax tumors
Shear Hepatoma 134				See Hepatoma 134
SJL/JW	Reticulum Cell Sarcoma	Spleen Homogenate	SJL/JW	
Spontaneous Adrenal	Adrenal	Solid	CE/J	
Spontaneous DBA/2 Mammary	Mammary Adenocarcinoma	Solid	DBA/2	
Spontaneous Mammary	Mammary Adenocarcinoma	Solid	DBA/2	
SV-122-TR4				See Moloney Sarcoma
T1699	Mammary Adenocarcinoma	Solid	DBA/2J	See Jax tumors
T1703	Mammary Adenocarcinoma	Solid	DBA/1J	See Jax tumors
X5563	Unknown	Solid	C3H/He	
YPC-1	Plasmacytoma	Ascites	BALB/c	
Zimmerman Ependymoblastoma				See Ependymoblatoma

Mouse Tumors From the Jackson Laboratory

*Length of lag phase before measurable tumor growth (5 mm average diameter) is evident in the first passage post thaw.

+MAP Test – Murine Antigen Profile for 12 common viruses: PVH, Rco 3, Sendal, GDVII, K, Polyoma, MVH, MAB, MHV, LCM, Ectromelia, LDH. Only positive results are listed.

Adapted from Jax Notes, No. 424, December 1975.

Species: Mouse

Mouse Tumors From Jackson Laboratory Cryopreserved in the DCTD Tumor Repository

Tumor Designation	Tumor Type	Host	Transplantation Freq. (Days)	Host Surv(D)	LagTime (D)*	Strain of Origin	Sex of Origin	MRI Bank #	MAP Test+
6C3HED (GL-1)	Anaplastic Carcinoma	DBA/1J	7	7-9	5-7	DBA		J-730	LDH+
B16	Melanoma (Amelanotic)	C57BL/6J	10	24-44	15-21	C57BL/6J		J-753	LDH+
BW8685	Pituitary	C57BR/dcJ	90-120	210-238	395	C57BR/cdj		J-794	LDH+
BW8883	Pituitary	C57L/J	60	182-273	65-73	C57L/J		J-756	LDH+
C1300	Round Cell (Neuroblastoma?)	A/J	10	19-32	14-21	A albino		J-734	LDH+ MHV+
СЗНВА	Mammary Adenocarcinoma	C3H/HeJ	10	39-77	11-16	C3H/An		H-758	LDH+
CaD1	Mammary Adenocarcinoma	DBA/1J	10	25-43	9-17	DBA.1H		H-742	LDH+
dbrB	Anaplastic Carcinoma	DBA/1J	7	7-9	5-7	DBA		J-730	LDH+
H2712	Mammary Adenocarcinoma	C3H/HeJ	7	14-27	11-19	C3H/HeHu		J-731	LDH+
H6	Hepatoma	A/J	10-14	14-44	7-9	A/J		J-750	LDH+
S180	Pleomorphic Sarcoma	BALB/cJ	10	21-31	9-11	"white" mouse		J-757	LDH+
S37	Pleomorphic Sarcoma	DBA/1J	7	21-28	6-13	"stock" mouse		J-759	LDH+
S91	Melanoma (Melanotic)	DBA/1J	17-21	49-98	16-18	DBA (Snell)		J-749	LDH+
SaD2	Fibrosarcoma	DBA/2J	10	19-21	8-15	DBA/2J		J-765	LDH+
Sal	Spindle-cell Sarcoma	A/J	7	9-15	7-9	A albino		J-733	LDH+
T1699	Mammary Adenocarcinoma	DBA/2J	10	19-39	8-10	DBA/2J		J-736	LDH+
T1703	Mammary Adenocarcinoma	DBA/1J	10	47-74	9-12	DBA/1Hu		J-737	LDH+

Rabbit Tumors

Species: Rabbit

Tumor	Histologic Type	Form	Strain of Origin/Transplant	Comments
Designation				
Brown-Pearce	Carcinoma	Solid	New Zealand White or Dutch	
	(Epithelioma)			

Rat Tumors

Species: Rat

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
11095	Prostate	Solid	Fischer 344	
16 Morris	Hepatoma	Solid	Buffalo	
20 Morris	Hepatoma	Solid	Buffalo	
23 Methapyrilene	Hepatocellular Carcinoma	Solid	Fischer 344	
2982	Olfactory Carcinoma	Solid	Fischer 344	
29 Methapyrilene	Hepatocellular Carcinoma	Solid	Fischer 344	
33 Methapyrilene	Hepatocellular Carcinoma	Solid	Fischer 344	
3M2N	Mammary Squamous Cell	Solid	Fischer 344	
	Carcinoma			
44 Morris	Hepatoma	Solid	Buffalo	
5123 Morris	Hepatoma	Solid	Buffalo	
68-2	Alveolar/Bronchiolar Carcinoma	Solid	Fischer 344	
7777 Morris	Hepatoma	Solid	Buffalo	
7800 Morris	Hepatoma	Solid	Buffalo	
8999 Morris	Hepatoma	Solid	Buffalo	
9618A Morris	Hepatoma	Solid	Buffalo	
A1011	Unknown	Solid	Fischer 344	
A1131-AR	Unknown	Solid	Fischer 344	
A1138-AL	Unknown	Solid	Fischer 344	
A1140-CL-10	Unknown	Solid	Fischer 344	
A546 (DMBZ				
Attenuated)	Unknown	Solid	Fischer 344	
A920 (Tetramin				
Attenuated Resistant)	Unknown	Solid	Fischer 344	
AA Ascites	Spontaneous Ascites	Ascites	Wistar	
ATC 64	Thyroid Carcinoma	Solid	Fischer 344	
BT/M520	Fibrosarcoma	Solid	Marshall 520	
CCO 1865	Mesothelioma	Solid	Fischer 344	
CSE	Fibrosarcoma	Solid	Fischer 344	H-1
DMBA1	Mammary Adenocarcinoma	Solid	Fischer 344	Several Lines
Dunning Leukemia	Atypical Monocytic Leukemia	Solid or Ascites		
Dunning Leukemia/ NSC-755 (6-MP)	Atypical Monocytic Leukemia	Solid	Fischer 344	

Species: Rat

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
Dunning Leukemia/				
NSC-3088	Atypical Monocytic Leukemia	Solid	Fischer 344	
(chlorambucil)	, ,			
Dunning Leukemia/				
NSC-10107 (nitromin)	Atypical Monocytic Leukemia	Solid	Fischer 344	
Dunning Leukemia/				
NSC-13875 (HMM)	Atypical Monocytic Leukemia	Solid	Fischer 344	
Dunning Leukemia/				
NSC-17261	Atypical Monocytic Leukemia	Solid	Fischer 344	
(benzoquinone)				
Dunning Leukemia/				
NSC-23892	Atypical Monocytic Leukemia	Solid	Fischer 344	
(dimethylbenzimidazole)				
Dunning Leukemia/				
NSC-26980 (mitomycin	Atypical Monocytic Leukemia	Solid	Fischer 344	
C)				
Dunning Leukemia/				
NSC-29422	Atypical Monocytic Leukemia	Solid	Fischer 344	
(thioguanosine)				
Dunning Leukemia/				
NSC-45059	Atypical Monocytic Leukemia	Solid	Fischer 344	
(o-acetyltetramin)				
Dunning Leukemia/				
NSC-51845	Atypical Monocytic Leukemia	Solid	Fischer 344	
(cyclohexylamine)				
	Seminal Vesicle			
Flexner-Jobling	Adenocarcinoma	Solid	Fischer 344	
Fran Tumor	Ovarian Carcinoma	Ascites	Sprague-Dawley	
GBT/W	Glial Tumor	Solid	Wistar	
HB Lynch-Fibroma 522	Fibroma	Solid	Fischer 344	
Hepatoma NK				See Novikoff
				Hepatoma
HMC	Histiocytoma	Solid	Fischer 344	
H-372	Leydig	Solid	Fischer 344	
H-540	Leydig	Solid	Fischer 344	

Species: Rat

Tumor Designation	Histologic Type	Form	Strain of Origin/Transplant	Comments
Iglesias	Ovarian Carcinoma	Solid	ACI	
IRS 9802	Spindle Cell Sarcoma	Solid	Fischer 344	
LC-18	Hepatoma	Solid	Fischer 344	
L. T. W. (Furth)	Leydig	Solid	Wistar	
MAMF2-TC	Fibrosarcoma	Solid	Fischer 344	
MET 149-2	Adenocarcinoma	Solid	Fischer 344	
MNU-Buffalo	Mammary Carcinoma	Solid	Buffalo	Several Lines
MtT	Anterior Pituitary	Solid	Fischer, Wistar	Several Lines
Murphy-Sturm			CRL, Wistar, Fischer 344,	
Lymphosarcoma (MSL)	Lymphosarcoma	Solid	Sprague-Dawley	
NBW-37	T cell Lymphoma	Mince	Fischer 344	
Novikoff Hepatoma				Sprague-Dawley
(Hepatoma NK)	Hepatoma	Solid or Ascites	Random Bred Albino	weanlings
NS104	Rhabdomyosarcoma	Solid	Fischer 344	
OR-16-3	Thymus Tumor	Solid	Fischer 344	
R35	Mammary Adenocarcinoma	Solid	Holtzman	
R3149	Leukemia	Solid	Fischer 344	
R3259	Giant Cell Sarcoma	Solid	Fischer 344	
R3327	Prostate	Solid	Copenhagen 2331	
R3327 (Pap)	Prostate	Solid	Copenhagen 2331	
Rice 500	Leydig	Solid	Fischer 344	
Rice D6	Leydig	Solid	Fischer 344	
Riejoel	Thyroid Adenocarcinoma	Solid	Fischer 344	
RNC 259	Pheochromocytoma	Solid	NEDH	
RNC 288	Insylinoma	Solid	NEDH	
		Solid or Spleen		
RNK-16	LGL Leukemia	Homogenate	Fischer 344	
SMT-2A	Mammary Carcinoma	Solid	Fischer 344	
Swarm	Chondrosarcoma	Solid	Sprague-Dawley	
TR.CLXXXVIII	Melanoma	Solid	ACI	
TR.DCXLIII	Pituitary	Solid	ACI	
Yoshida Hepatoma	Hepatoma	Ascites	Sprague-Dawley	
Yoshida Sarcoma	Sarcoma	Solid or Ascites	Holzman, S-D	

Rat Tumors From Dr. Robert Noble

(Endocrine-Responsive)

Information concerning the endocrinologic characteristics of the various tumor systems indicated in the "comments' has been provided by Dr. Noble.

Species: Rat (Noble)

Tumor	Histologic Type	Form	Strain of Origin/	Comments
Designation			Transplant	
1 Cvx-34A(1)	Cervical Carcinoma	Solid	NB	
1 Cvx-44Z	Cervical Carcinoma	Solid	NB	Estrogen dependent
1 Lym-206	Lymphoma	Solid	NB	Hormone stimulated
1 Lym-209(A)	Lymphoma	Solid	NB	Hormone stimulated, VLB sensitive
1 Lym-214	Lymphosarcoma	Solid	NB	Hormone stimulated
1 Og-3	Osteogenic Sarcoma	Solid	NB	
1 Pan-14Ax(1)	Adenocarcinoma	Solid	NB	Hormone stimulated
1 Tes-13E	Leydig Cell Carcinoma	Solid	NB	Estrogen dependent
1 Tes-15E	Leydig Cell Carcinoma	Solid	NB	Estrogen dependent
2 Lym-11(a)	Metaplastic, Adenocarcinoma Fibroblast Overgrowth	Solid	NB	Estrogen dependent
2-Pan-6A	Pituitary Adenoma	Solid	NB	Hormone stimulated
2 Pr-9F	Prostatic Adenocarcinoma	Solid	NB	Estrogen dependent
2 Pr-12	Prostatic Adenocarcinoma	Solid	NB	Estrogen dependent
2 Pr-112Bx(1)	Prostatic Carcinoma, Scirrhous	Solid	NB	
2 Pr-114B	Prostatic Adenocarcinoma	Solid	NB	Estrogen dependent
2 Pr-121D(1)	Prostatic Carcinoma, Secretory	Solid	NB	Adrogen Dependent
2 Pr-121D(1)/R	Prostatic Carcinoma	Solid	NB	Resistant to testosterone
2 Ut-10(5)	Fibroma	Solid	NB	Estrogen dependent
3 Kid-13	Kidney Adenocarcinoma	Solid	NB	
3 Lym-19	Lymphosarcoma	Solid	NB	
4 Pan-6	Adenocarcinoma	Solid	NB	
4 Sk-3A(3)Z	Squamous Cell Carcinoma	Solid	NB	
4 Ut	Hemangiosarcoma	Solid	NB	
4 Ut-6(2)	Fibrosarcoma	Solid	NB	Estrogen dependent of hormone stimulated
5 Pan-7	Undifferentiated Pancreatic	Solid	NB	
	Carcinoma			
5 Sal	Undifferentiated Carcinoma	Solid	NB	
5 Sk-3	Melanoma	Solid	NB	
5 Ut-2	Uterine Adenocarcinoma	Solid	NB	Estrogen dependent (?)
6 Pan-4	Undifferentiated Pancreatic Carcinoma	Solid	NB	
7 Ut-13	Endometrial Adenocarcinoma	Solid	NB	

Species: Rat (Noble)

Tumor	Histologic Type	Form	Strain of Origin/	Comments
Designation	31		Transplant	
8 Lym-9(1)	Lymphosarcoma	Solid	NB	VLB resistant
8 Lym-108(1)	Lymphatic Leukemia	Solid	NB	VLB resistant
9 Lym-23	Lymphosarcoma	Solid	NB	
10 Lym-4	Negative Spleen	Solid	NB	
11 Lym-9	Lymphosarcoma	Solid	NB	
13 Pr-5	Prostatic Carcinoma, Undifferentiated	Solid	NB	Estrogen pellet implant required
14 Lym-5	Lymphosarcoma stimulated	Solid	NB	Hormone
14 Pr-5	Prostatic Carcinoma	Solid	NB	
15 Pr-2	Prostatic Adenocarcinoma	Solid	NB	
16 Pr-3	Prostatic Adenocarcinoma	Solid	NB	
17 Lym-4	Lymphosarcoma implant required	Solid	NB	Estrogen pellet
17 Lym-5	Leukemia	Solid	NB	
18 Lym-6	Lymphosarcoma	Solid	NB	Estrogen dependent
19 Lym-3	Lymphosarcoma	Solid	NB	Estrogen dependent
19 Pr-19	Prostatic Fibroadenoma	Solid	NB	
20 Pr-1	Prostatic Fibroadenoma	Solid	NB	
20 Lym-3	Lymphosarcoma	Solid	NB	Estrogen pellet implant required
21 Pr-9	Prostatic Carcinoma	Solid	NB	
22 Pr-8	Prostatic Adenocarcinoma	Solid	NB	

IN VITRO Established Cell Lines

A. Quality Control and Characterization- Procedures for the incorporation of new cell lines into the Tumor Bank: Upon receipt, each cell line is immediately transferred to fresh antibiotic free medium and cultured for one week, after which it is tested for mycoplasma (PPLO) contamination. Standard culture procedures under aerobic and anaerobic conditions, as well as the orcein staining procedure of Fogh, are used. The PPLO medium is extremely rich, and this procedure will also detect most bacterial and fungal contaminants.

For human cell lines, we performed testing on the original stocks which includes sterility (fluid thioglycolate medium and tryptic soy broth), mycoplasma, MAP (PVM, Poly, GD VII Ectro, Reo 3, Sendai, MVM, MHV, LCM and LDH) and viral testing. The PCR viral testing we performed on cell lines included HBV, HIVI, HIVII, HTLV-1, HTLVII, JCV and MoMuL.

The NCI-60 panel of human tumor cell lines are perhaps some of the most extensively characterized cell lines in broad laboratory use. Molecular Characterization Data is publicly available on the DTP web site at http://dtp.cancer.gov/mtargets/mt index.html.

Authentication is done by Applied Biosystems AmpFISTR Identifiler testing with PCR amplification.

- B. *Freezing and Storage* The cell cultures are frozen in ampules containing 1.0 ml of cell suspension at 2-6 x 10⁶ cells/ml in fresh culture medium containing 10% DMSO. Freezing is performed as described previously. Twenty-four hours after freezing, a representative ampule is removed, thawed, and viable cell count is performed using the trypan blue dye exclusion procedure. The culture is also tested for its ability to initiate a heavy viable culture. Cell preparations which show less than 50% viability or poor growth are discarded and a new lot is prepared. Keeping cells stored properly, thawing them and maintaining cells requires careful attention to details. Unused frozen vials should be kept at -70 to -196 °C (preferably in vapor phase).
- C. Recommended Thawing Procedure- as described in the PROCEDURES section of this document.

Human In Vitro Cell Lines

Species: Human In Vitro Cell Lines

Designation	Tissue of Origin	Histologic Type	Growth Medium	Comments
786-0	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Williams
A2780	Ovary	Adenocarcinoma	RPMI 1640	From Dr. Hamilton
A498	Kidney	Renal Cell Carcinoma	RPMI 1640	ATCC
A549	Lung	Non-small Cell	RPMI 1640	ATCC
A704	Kidney	Renal Cell Carcinoma	RPMI 1640	ATCC
ACHN	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Schmid
ASPS-1	Lymph Node	Alveolar Soft Part Sarcoma	DMEM:F12;10%FBS	From Vistica
BT-549	Breast	Adenocarcinoma	RPMI 1640	ATCC
CAKI-1	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Loveless
CCRF-CEM	Lymph	Leukemia	RPMI 1640	ATCC
CCRF-SB	Lymph	Leukemia	RPMI 1640	ATCC
CHA-59	Bone	Osteosarcoma	RPMI 1640	From Drs. Shoemaker and McLachlan
COLO 205	Colon	Adenocarcinoma	RPMI 1640	ATCC
DMS-114	Lung	Small Cell	RPMI 1640	From Dr. Pettengill
DU-145	Prostate	Carcinoma	RPMI 1640	ATCC
EKVX	Lung	Adenocarcinoma	RPMI 1640	From Dr. Fodstad
HCC-2998	Colon	Adenocarcinoma	RPMI 1640	From Dr. Fidler
HCT-15	Colon	Carcinoma	RPMI 1640	ATCC
HCT-116	Colon	Adenocarcinoma	RPMI 1640	ATCC
HOP-18	Lung	Large Cell Carcinoma	RPMI 1640	From Drs. Liu/Casero
HOP-62	Lung	Adenocarcinoma	RPMI 1640	From Drs. Liu/Casero
HL-60	Ascites	Pro-myelocytic Leukemia	RPMI 1640	From E. Jensen
H-MESO-1		Mesothelioma	RPMI 1640	
HS 578T	Breast	Adenocarcinoma	RPMI 1640	ATCC
HS 913T	Lung	Mixed Cell	RPMI 1640	ATCC
HT-29	Colon	Adenocarcinoma	RPMI 1640	ATCC
IGR-OV1	Ovary	Adenocarcinoma	RPMI 1640	From Dr. Benard
KM-12	Colon	Adenocarcinoma	RPMI 1640	From Dr. Fidler
KM 20L2	Colon	Adenocarcinoma	RPMI 1640	From Dr. Fidler
K-562	Lymph	Leukemia	RPMI 1640	ATCC
LOVO	Colon	Adenocarcinoma	RPMI 1640	ATCC
LOX IMVI	Lymph Node Metastasis	Amelanotic Melanoma	RPMI 1640	From Dr. Fodstad
LXFL 529	Lung	Large Cell Carcinoma	RPMI 1640	From Dr. Fiebig

Species: Human In Vitro Cell Lines

Designation	Tissue of Origin	Histologic Type	Growth Medium	Comments
MALME-3M	Lung Metastasis	Melanoma	RPMI 1640	ATCC
MCF7	Breast	Adenocarcinoma	RPMI 1640	From Dr. Cowan
MDA-MB-231	Breast	Adenocarcinoma	RPMI 1640	From Dr. Moore
MDA-MB-435	Melanoma	Adenocarcinoma	RPMI 1640	From Dr. Steeg
MDA-MB-468	Breast	Adenocarcinoma	14 101 1010	Trom Br. cloog
MOLT-4	Lymph	Leukemia	RPMI 1640	ATCC
MX-1	Breast	Carcinoma	RPMI 1640	From Dr. Giovannelli
M14	Brodet	Amelanotic Melanoma	RPMI 1640	From Dr. Kern
M19-MEL		Amelanotic Melanoma	RPMI 1640	From Dr. Kern
NC-37	Lymphoblast	Normal	1 10 10	Trom Biritom
NCI-293TT	Embryonic Kidney	Kidney	DMEM 10% FBS	From Drs. Schiller and Pang
NCI-H1299	Lung	Adenocarcinoma	RPMI 1640	From Drs. Gazdar and Minna
NCI-H2887	Lung	Adenocarcinoma	RPMI 1640	From Drs. Gazdar and Minna
NCI-H3122	Lung	Adenocarcinoma	RPMI 1640	From Drs. Gazdar and Minna
NCI-H322M	Lung	Adenocarcinoma	RPMI 1640	From Dr. Gazdar
NCI-H3255	Lung	Adenocarcinoma	RPMI 1640	From Drs. Gazdar and Minna
NCI-H358M	Lung	Bronchioalveolar Carcinoma	RPMI 1640	From Dr. Gazdar
NCI-H460	Lung	Large Cell	RPMI 1640	From Dr. Gazdar
NCI-H522	Lung	Adenocarcinoma	RPMI 1640	From Dr. Gazdar
NCI-H69	Lung	Small Cell Carcinoma	RPMI 1640	From Dr. Gazdar
NCI-H82	Lung	Small Cell Carcinoma	RPMI 1640	From Dr. Gazdar
NCI-H838	Lung	Adenocarcinoma	RPMI 1640	From Drs. Gazdar and Minna
NCI/ADR-	Ovary	Adenocarcinoma	RPMI 1640	From Dr. Cowan
RES				
OVCAR-3	Ovary	Adenocarcinoma	RPMI 1640	From Drs. Ozols and Hamilton
OVCAR-4	Ovary	Adenocarcinoma	RPMI 1640	From Drs. Ozols and Hamilton
OVCAR-5	Ovary	Adenocarcinoma	RPMI 1640	From Drs. Ozols and Hamilton
OVCAR-8	Ovary	Adenocarcinoma	RPMI 1640	From Drs. Ozols and Hamilton
PC-3	Prostate	Carcinoma	RPMI 1640	From Dr. Kaighn
PC-3/M	Prostate	Carcinoma	RPMI 1640	From Dr. Kaighn
RPMI-7951		Melanoma	RPMI 1640	ATCC
RPMI-8226	Lymph	Leukemia	RPMI 1640	ATCC
RXF 393	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Fiebig
RXF 631	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Fiebig

Species: Human In Vitro Cell Lines

Designation	Tissue of Origin	Histologic Type	Growth Medium	Comments
SF-268	CNS	Glioblastoma	RPMI 1640	From Dr. Rosenblum
SF-539	CNS	Glioblastoma	RPMI 1640	From Dr. Rosenblum
SHP-77	Lung	Small Cell Carcinoma	RPMI 1640	From Dr. Fisher
SK-OV-3	Ovary	Adenocarcinoma	RPMI 1640	ATCC
SK-MEL-2		Melanoma	RPMI 1640	ATCC
SK-MEL-5		Melanoma	RPMI 1640	ATCC
SK-MEL-28		Melanoma	RPMI 1640	ATCC
SK-MES-1	Lung	Squamous Cell Carcinoma	RPMI 1640	ATCC
SN12A1	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Fidler
SN12C	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Fidler
SN12K1	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Fidler
SN12L1	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Fidler
SN12S1	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Fidler
SNB-7	CNS	Glioblastoma	RPMI 1640	From Dr. Kornblith
SNB-19	CNS	Glioblastoma (Same as U251)	RPMI 1640	From Dr. Kornblith
SNB-75	CNS	Glioblastoma	RPMI 1640	From Dr. Kornblith
SNB-78	CNS	Astrocytoma	RPMI 1640	From Dr. Kornblith
SR	Pleural effusion	Lymphoma	RPMI 1640	From Dr. Urba
SW-620	Colon		RPMI 1640	ATCC
T-47D	Breast		RPMI 1640	Not distributed to commercial firms or
				for commercial purposes
TK-10	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Clayman
UACC-62		Melanoma	RPMI 1640	From Dr. Leibowitz
UACC-257		Melanoma	RPMI 1640	From Dr. Leibowitz
UCSD 242L		Melanoma	RPMI 1640	From Dr. Taetle
UCSD 354K		Melanoma	RPMI 1640	From Dr. Taetle
UO-31	Kidney	Renal Cell Carcinoma	RPMI 1640	From Dr. Linehan
U-251	CNS	Glioblastoma (Same as SNB-19)	RPMI 1640	From Dr. Bigner
WIDR	Colon	Adenocarcinoma	RPMI 1640	ATCC
XF 498	CNS	Glioblastoma	RPMI 1640	From Dr. Fiebig

NIH Licensed Cell Lines

Species: NIH Licensed Cell Lines

Designation	Tissue of Origin	Histologic Type	Growth Medium	Comments
NCI-293TT	Human Embryonic	Kidney	DMEM 10% FBS	Schiller/Pang
	Kidney			
NCI-CHOdeltafurin	Ovarian		DMEM, 10% FBS, 200uM proline,	Fitzgerald
			1% Pen-Strep	
NCI-H1284	Human Lung	Adenocarcinoma	ACL-4 + 10% FBS	Gazdar/Minna
NCI-H1299	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H1395	Human Lung	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H1435	Human Lung NSCLC	Adenocarcinoma	ACL-4(DMEM:F12)	Gazdar/Minna
NCI-H1437	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H1568	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H1944	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H1993	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H226	Human Lung	Squamous Cell	RPMI 1640	Gazdar
NCI-H23	Human Lung	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H2887	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H3122	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H322M	Human Lung	Bronchi Alveolar Carcinoma	RPMI 1640	Gazdar
NCI-H3255	Human Lung NSCLC	Adenocarcinoma	ACL-4 + 10% FBS + 1% Glutamine	Gazdar/Minna
NCI-H358	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna
NCI-H460	Human Lung	Large Cell Carcinoma	RPMI 1640	Gazdar
NCI-H522	Human Lung	Adenocarcinoma	RPMI 1640	Gazdar
NCI-H838	Human Lung NSCLC	Adenocarcinoma	RPMI 1640	Gazdar/Minna

Cell Line	Sex	Age	Histologic Type	Comments	Treatment	Source
			CC	LON		
COLO 205	M	70	Adenocarcinoma	Can Res 38: 1345-1455, 1978		
HCC-2998			Carcinoma		N	
HTC-15			Adenocarcinoma	Can Res 39: 1020-1025, 1970		
HTC-116			Carcinoma	Can Res 41: 1761-1766, 1981		
HT-29	F	44	Adenocarcinoma, GR III	Human Tumor Cells <i>In Vitro</i> : 115-159, 1975		Primary
KM-12			Adenocarcinoma	Can Res 48: 1943-1948, 1988	N	
SW-620	М	51	Adenocarcinoma	Can Res 36: 4562-4569, 1976		Metastasis
		•		NS		
SF-268	F	24	Anaplastic Astrocytoma	Acta Neuropathol 75: 92-103, 1987		
SF-295	F	67	Glioblastoma- Multiforme	Acta Neuropathol 75: 92-103, 1987		
SF-539				J Neuropathol Exp Neurol 40: 201- 229, 1981		
SNB-19	M	47	Glioblastoma (Same as U251)	Cancer 47: 255, 1981	N	
SNB-75	F		Astrocytoma		N	
U-251	M	75	Glioblastoma (Same as SNB-19)	J Neuropathol Exp Neurol 40: 410-427, 1981		
				KEMIA		
CCRF-CEM	М	4	Acute Lymphoblastic Leukemia	Can Res 18: 522-529, 1965		
HL-60(TB)	F	36	Promyelocytic Leukemia	Nature 270: 347-349, 1977		PBL
K-562	F	53	Chronic Myelogenous Leukemia	Blood 45: 321-334, 1975		Pleural Effusion
MOLT-4	М	19	Acute Lymphoblastic Leukemia	JCNI 49:891-895, 1972		PB
RPMI-8226	М	61	Myeloma	Proc Soc Exp Biol Med 125: 1246- 1250, 1967		РВ
SR	М	11	Large Cell, Immunoblastic		Υ	
				ÜNG		
A549/ATCC	М	58	Adenocarcinoma	JNCI 51: 1417-1423, 1973		Primary
EKVX	М		Adenocarcinoma			
HOP-62	F	60	Adenocarcinoma		N	
HOP-92	М	62	Large Cell, Undifferentiated		N	
NCI-H23			Adenocarcinoma	Can Res 45: 2913-2923, 1985	N	

Cell Line	Sex	Age	Histologic Type	Comments	Treatment	Source
				Continued)		
NCI-H226			Squamous	Can Res 45: 2913-2923, 1985		
NCI-H322M			Small Cell Bronchioalveolar Carcinoma		N	
NCI-H460	М		Large Cell Carcinoma	Science 246: 491-494, 1989	N	Pleural Effusion
NCI-H522			Adenocarcinoma	Can Res 45: 2913-2923, 1985		
			MAN	MARY		
MCF7	F	69	Adenocarcinoma	JCNI 51:1409-1417, 1973	Υ	
HS 578T	F	74	Carcinosarcoma	JNCI 58:1795-1806, 1977		Primary
MDA-MB 231	F	51	Adenocarcinoma	JNCI 53: 661-674, 1974	Υ	
MDA-MB-468	F	51	Adenocarcinoma	Cancer Res 40: 3118-3129, 1980		
BT-549	F	72	Papillary Infiltrating Ductal Carcinoma	No Publication		Metastasis
T-47D	F	54	Infiltrating Ductal Carcinoma	Eur J Cancer 15: 659-670, 1979		Not for commercial use
		•	MELA	ANOMA		
LOX IMVI			Malignant Amelanotic Melanoma	Int J Cancer 41:442-449, 1988		
M14						
MALME-3M	М	43	Malignant Melanoma	Human Tumor Cells <i>In Vitro</i> , 115-159, 1975		Metastasis
MDA-MB-435	F	31	Adenocarcinoma	Can Res 40: 3118-3129, 1980	N	
SK-MEL-2	М	60	Malignant Melanoma	Human Tumor Cells <i>In Vitro</i> , 115-159, 1975		Metastasis
SK-MEL-5			Malignant Melanoma	PNAS 73: 3278-3282, 1976		Metastasis
SK-MEL-28			Malignant Melanoma	PNAS 73: 3278-3271, 1976		
UACC-62						
UACC-257						
			OVA	ARIAN	·	
IGR-OV1	F	47	Cystoadenocarcinoma	Can Res 45: 4970-4979, 1985	N	
NCI/ADR-RES	F		Adenocarcinoma	JNCI 90(11): 6/3/1998		See Note *
OVCAR-3	F	60	Adenocarcinoma	Can Res 43: 5379-5389, 1983	Υ	Ascites
OVCAR-4	F	42	Adenocarcinoma	Sem Oncol 11: 285-298, 1984	Υ	
OVCAR-5	F	67	Adenocarcinoma	Sem Oncol 11: 285-298, 1984	N	

Cell Line	Sex	Age	Histologic Type	Comments	Treatment	Source
			OVAR	IAN (Continued)		
OVCAR-8	F	64	Adenocarcinoma	Sem Oncol 11: 285-298, 1984	Υ	
SK-OV-3	F	64	Adenocarcinoma	Human Tumor Cells In Vitro, 115-	Υ	Ascites
				159, 1975		
			P	PROSTATE		
DU-145	M	69	Carcinoma	Int J Cancer 21: 274-281, 1978	Υ	
PC-3	M	62	Adenocarcinoma	Invest Urol 17: 16-23, 1979	Υ	Metastasis
				RENAL		
786-O	M	58	Adenocarcinoma	In Vitro 12: 623-627, 1976	N	
A498	F	52	Adenocarcinoma	JNCI 51: 1417-1423, 1973		
ACHN	M	22	Renal Cell Carcinoma	Can Res 42: 4948-4953, 1973		
CAKI-1	M	49	Clear Cell Carcinoma	Human Tumor Cells In Vitro, 115-	Υ	Metastasis
				159, 1975		
RXF 393	M	54	Poorly Differentiated	Contrib Oncol 42, 1992	N	
			Hypernephroma			
SN12C	М	43	Carcinoma	Can Res 46: 4109-4115, 1986		
TK-10	М	43	Spindle Cell Carcinoma	Can Res 47: 3856-3862, 1987	N	
UO-31			Carcinoma		N	

^{*}Prior to 1998, NCI/ADR-RES was known as MCF-7/ADR-RES multidrug-resistant cell line. The cell line was re-designated because DNA fingerprinting analysis showed that NCI/ADR-RES was unrelated to MCF-7. Journal of the National Cancer Institute, Vol. 90, No. 11, June 3, 1998

NON-human In Vitro Cell Lines

Species: Non-human In Vitro Cell lines

Designation	Species	Histologic Type	Tissue of	Growth Medium	Comments
			Origin		
4G11	Mouse	Hybridoma		RPMI/10% FCS	From Nissely
B16F ₁	Mouse	Melanoma	Ear (B16)	EMEM	From Fidler
B16F ₁₀	Mouse	Melanoma	Lung met.	EMEM	From Fidler; high lung met.
B16F ^{Ĺř6}	Mouse	Melanoma	Lung met.	EMEM	From Fidler; low lung met.
B16BL-6	Mouse	Melanoma	Bladder met.	EMEM	From Fidler; intermediate lung met.
C3HIOT ½	Mouse				No info
CHO 1C T6	Hamster	Normal	Ovary	F12	
Colon 26	Mouse	Carcinoma	Colon	RPMI 1640	
FBL-3	Mouse	Leukemia			
M5076	Mouse	Reticulum Cell Sarcoma		RPMI 1640	
MADB 106	Rat				
MPC-11	Mouse	Myeloma			
P388	Mouse	Leukemia	Ascites	RPMI 1640	
P388/ADR	Mouse	Leukemia	Ascites	RPMI 1640	
P3X63	Mouse				No info
PAN 02	Mouse	Adenocarcinoma	Pancreas	RPMI 1640	
VX-2	Rabbit	Alveolar Soft Part Sarcoma		DMEM:F12; 10% FBS	Samuel, Albert Einstein
YAC	Mouse	Lymphoma		EMEM	

Yeast Strains

Species: Yeast Strains Used for NCI Compound Screening

50636 50644 50648	none (wild-type control) rad50	MATα rad52ΔURA3 erg6ΔLEU2 pdr1ΔLEU2 pdr3ΔhisG::URA3::hisG ade2 ade3 leu2 trp1 ura3 cyh2 MATα erg6ΔLEU2 pdr1ΔLEU2 pdr3ΔhisG::URA3::hisG ade2 ade3 leu2 ura3 cyh2
	, , ,	MATα erg6∆LEU2 pdr1∆LEU2 pdr3∆hisG::URA3::hisG ade2 ade3 leu2 ura3 cyh2
50648	rad50	
	1	MATα rad50∆kan ^r ade2 ade3 leu2 ura3 trp1 cyh2
50650	mgt1	MAT mtg1∆kan ^r erg6∆LEU2 pdr1∆LEU2 pdr3∆hisG::URA3::hisG ade2 ade3 leu2 trp1 ura3 cyh2
50652	rad50	MATα rad50∆kan ^r erg6∆LEU2 pdr1∆LEU2 pdr3∆hisG::URA3::hisG ade2 ade3 leu2 ura3 cyh2
50654	mec2-1	MATα mec2-1 erg6∆LEU2 pdr1∆LEU2 pdr3∆hisG::URA3::hisG ade2 ade3 leu2 ura3 cyh2
50740	rad14	MATα rad14∆kan ^r erg6∆LEU2 pdr1∆LEU2 pdr3∆hisG::URA3::hisG ade2 ade3 leu2 ura3 cyh2
50745	sgs1 mgt1	MATα sgs1∆LEU2 mgt1kan ^r erg6∆LEU2 pdr1∆LEU2 pdr3∆hisG ade2 ade3 leu2 ura3 cyh2
50768	GPDp-CLN2	MATα URA3-GPDp-CLN2 erg6⊿TRP1 pdr1⊿LEU2 pdr3⊿hisG ade2 ade3 leu2 trp1 ura3 cyh2
50771	GPDp-CLN2 rad14	MATα URA3-GPDp-CLN2 rad14∆kan ^r erg6∆TRP1 pdr1∆LEU2 pdr3∆hisG ade2 ade3 leu2 ura3 cyh2 trp1
50779	bub3	MATα bub3́⊿URÁ3 erg6∆TRP1 pdr1∆LEU2 pdr3∆hisG ade2 ade3 leu2 ura3 cyh2 trp1
50780	none (wild-type control)	MATα erg6⊿TRP1 pdr1⊿LEU2 pdr3⊿hisG ade2 ade3 leu2 trp1 ura3 cyh2
50834	mlh1	MATα mlh1⊿TRP1 erg6⊿TRP1 pdr1⊿LEU2 pdr3⊿hisG ade2 ade3 leu2 ura3 cyh2
50835	sgs1	MATα sgs1⊿LEU2 erg6⊿TRP1 pdr1⊿LEU2 pdr3⊿hisG ade2 ade3 leu2 ura3 cyh2
50858	mlh1 rad18	MATα mlh1∆TRP1 rad18∆LEU2 erg6∆LEU2 pdr1∆LEU2 pdr3∆hisG::URA3::hisG ade2 ade3 leu2 ura3 cyh2 (trp1?)
50891	rad18	MATα rad18⊿URA3 erg6⊿TRP1 pdr1⊿LEU2 pdr3⊿hisG ade2 ade3 leu2 trp1 ura3 cyh2

Notes:

- Store at -70°C to -80°C. To establish working stock: scrape frozen culture with a wooden applicator stick and apply sample to agar-containing media (vials should remain frozen).
- All strains are derived from L. Hartwell laboratory strains in the A364a genetic background.
- The erg6 pdr1 pdr3 mutations in all strains serve to make yeast more sensitive to a variety of compounds.
- The allele present at the *TRP1* locus is unknown for SPY50649 (strain is phenotypically Trp⁺ by virtue of *TRP1* at the *MLH1* locus).

Index of Tumors and Cell Lines

Tumor Designation	Histologic Type	Species	Page
10-24	Mesothelioma	Hamster	19
10838	Seminoma	Hamster	19
10 Lym-4	Negative Spleen	Rat (Noble)	47
11095	Prostate	Rat	42
11348P	Pulmonary Squamous Cell Carcinoma	Hamster	19
11963V	Leiomyosarcoma	Hamster	19
11 Lym-9	Lymphosarcoma	Rat (Noble)	47
1247	Mammary Adenocarcinoma	Mouse	28
13 Pr-5	Prostatic Carcinoma, Undifferentiated	Rat (Noble)	47
14 Lym-5	Lymphosarcoma Stimulated	Rat (Noble)	47
14 Pr-5	Prostatic Carcinoma	Rat (Noble)	47
15 Pr-2	Prostatic Adenocarcinoma	Rat (Noble)	47
16 Morris	Hepatoma	Rat	42
16 Pr-3	Prostatic Adenocarcinoma	Rat (Noble)	47
17 Lym-4	Lymphosarcoma, implant required	Rat (Noble)	47
17 Lym-5	Leukemia	Rat (Noble)	47
18 Lym-6	Lymphosarcoma	Rat (Noble)	47
19 Lym-3	Lymphosarcoma	Rat (Noble)	47
19 Pr-19	Prostatic Fibroadenoma	Rat (Noble)	47
1 Cvx-34A(1)	Cervical Carcinoma	Rat (Noble)	16
1 Cvx-44Z	Cervical Carcinoma	Rat (Noble)	46
1 Lym-206	Lymphoma	Rat (Noble)	46
1 Lym-209 (A)	Lymphoma	Rat (Noble)	46
1 Lym-214	Lymphosarcoma	Rat (Noble)	46
1 Og-3	Osteogenic Sarcoma	Rat (Noble)	46
1 Pan-14Ax(1)	Adenocarcinoma	Rat (Noble)	46
1 Tes-13E	Leydig Cell Carcinoma	Rat (Noble)	46
1 Tes-15E	Leydig Cell Carcinoma	Rat (Noble)	46
20 Lym-3	Lymphosarcoma	Rat (Noble)	47
20 Morris	Hepatoma	Rat	42
20 Pr-1	Prostatic Fibroadenoma	Rat (Noble)	47
21 Pr-9	Prostatic Carcinoma	Rat (Noble)	47
22047	Adenocarcinoma	Hamster	19
22 Pr-8	Prostatic Adenocarcinoma	Rat (Noble)	47
2309V	Pancreatic Islet Cell Adenocarcinoma	Hamster	19
23 Methapyrilene	Hepatocellular Carcinoma	Rat	42
2982	Olfactory Neuroblastoma	Rat	42
29 Methapyrilene	Hepatocellular Carcinoma	Rat	42
2 Lym-11(a)	Metaplastic, Adenocarcinoma Fibroblast Overgrowth	Rat (Noble)	46
2-Pan-6A	Pituitary Adenoma	Rat (Noble)	46
2 Pr-9F	Prostatic Adenocarcinoma	Rat (Noble)	46
2 Pr-12	Prostatic Adenocarcinoma	Rat (Noble)	46

2 Pr-112Bx(1)	Prostatic Carcinoma Scirrhous	Rat (Noble)	46
2 Pr-114B	Prostatic Adenocarcinoma	Rat (Noble)	46
2 Pr-121D(1)	Prostatic Carcinoma, Secretory	Rat (Noble)	46
2 Pr-121D(1)/R	Prostatic Carcinoma, Secretory	Rat (Noble)	46
2 Ut-10(5)	Fibroma	Rat (Noble)	46
33 Methapyrilene	Hepatocellular Carcinoma	Rat	42
36230 TLT	Hemangiodenothelioma	Mouse	28
36257 TTT	Fibrosarcoma	Mouse	28
38290 TTT	Fibrosarcoma	Mouse	28
3 Kid-13	Kidney Adenoarcinoma	Rat (Noble)	46
3 Lym-19	Lymphosarcoma	Rat (Noble)	46
3M2N	Mammary Squamous Cell Carcinoma	Rat	42
42052 TST	Hemangioendothelioma	Mouse	28
42076 TST		Mouse	28
	Hemangioendothelioma		
44316 LTST	Hemangioendothelioma	Mouse	28
44347 TST	Hemangioendothelioma	Mouse	28
44 Morris	Hepatoma	Rat	42
46362 TTT	Fibrosarcoma	Mouse	28
46363 TTT	Fibrosarcoma	Mouse	28
4671	Pancreatic Duct Adenocarcinoma	Hamster	19
4G11	Hybridoma	Mouse/Non-human <i>In Vitro</i>	28, 60
4 Pan-6	Adenocarcinoma	Rat (Noble)	46
4 Sk-3A(3)Z	Squamous Cell Carcinoma	Rat (Noble)	46
4 Ut	Hemangiosarcoma	Rat (Noble)	46
4 Ut-6(2)	Fibrosarcoma	Rat (Noble)	46
50636		Yeast Strains	62
50644		Yeast Strains	62
50648		Yeast Strains	62
50650		Yeast Strains	62
50652		Yeast Strains	62
50654		Yeast Strains	62
50740		Yeast Strains	62
50745		Yeast Strains	62
50768		Yeast Strains	62
50771		Yeast Strains	62
50779		Yeast Strains	62
50780		Yeast Strains	62
50834		Yeast Strains	62
50835		Yeast Strains	62
50858		Yeast Strains	62
50891		Yeast Strains	62
5123 Morris	Morris Hepatoma	Rat	42
5 Pan-7	Undifferentiated Pancreatic	Rat (Noble)	46
	Carcinoma	, ,	
5 Sal	Undifferentiated Carcinoma	Rat (Noble)	46

5 Sk-3	Melanoma	Rat (Noble)	46
5 Ut-2	Uterine Adenocarcinoma	Rat (Noble)	46
68-2	Alveolar/Bronchiolar Carcinoma	Rat	42
6973P	Leiomyosarcoma	Hamster	19
6C3HED	Lymphosarcoma	Jackson Lab Mouse	38
6C3HED (Gardner)	Lymphosarcoma	Mouse	28
6C3HED/AR Res.	Lymphosarcoma	Mouse	28
6 Pan-4	Undifferentiated Pancreatic Carcinoma	Rat (Noble)	46
70429	Plasmacytoma	Mouse	28
70429/Azaserine (NSC- 3425)	Plasmacytoma	Mouse	28
7777 Morris	Morris Hepatoma	Rat	42
7800 Morris	Morris Hepatoma	Rat	42
786-0	Renal Cell Carcinoma	Human In Vitro	50, 58
7 Ut-13	Endometrial Adenocarcinoma	Rat (Noble)	46
8721R	Renal Carcinoma	Hamster	19
8999 Morris	Morris Hepatoma	Rat	42
8 Lym-9(1)	Lymphosarcoma	Rat (Noble)	47
8 Lym-108(1)	Lymphatic Leukemia	Rat (Noble)	47
91632	Reticulum Cell Sarcoma	Mouse	28
9242	Parotid Acinar Cell Adenocarcinoma	Hamster	19
9618A Morris	Hepatoma	Rat	42
9 Lym-23	Lymphosarcoma	Rat (Noble)	47
A1011	Unknown	Rat	42
A1131-AR	Unknown	Rat	42
A1138-AL	Unknown	Rat	42
A1140-CL-10	Unknown	Rat	42
A2780	Adenocarcinoma	Human In Vitro	50
A498	Renal Cell Carcinoma	Human In Vitro	50, 58
A546 (DMBZ)	Unknown	Rat	42
A549/ATCC	Nonsmall Cell	Human In Vitro	50, 56
A704	Renal Cell Carcinoma	Human In Vitro	50
A920 (Tetramin)		Rat	42
AA Ascites	Spontaneous Ascites	Rat	42
ACHN	Renal Cell Carcinoma	Human In Vitro	50, 58
Adenocarcinoma 755 (CA755, Bagg-Jackson)	Mammary Adenocarcinoma	Mouse	28
ADJ-PC-6	Plasmacytoma	Mouse	28
ASPS	Alveolar Soft Part Sarcoma	Human/Mouse	14, 28
ASPS-1	Alveolar Soft Part Sarcoma	Human/In Vitro	14, 50
AT	Adrenal	Mouse	28
ATC 64	Thyroid Carcinoma	Rat	42
AtT/20	Anterior Pituitary	Mouse	28
B16	Melanoma (amelanotic)	Jackson Lab Mouse	38
			60
B16BL-6	Melanoma	Non-human <i>In Vitro</i>	100

B16F ¹⁰	Melanoma	Non-human In Vitro	60
B16F ^{Lr6}	Melanoma	Non-human In Vitro	60
BL12 Sensitive	Lymphosarcoma	Mouse	28
BL12/Hc Ra	Lymphosarcoma	Mouse	28
Brown-Pearce	Carcinoma (Epithelioma)	Rabbit	40
BT/M520	Fibrosarcoma	Rat	42
BT-549	Adenocarcinoma	Human In Vitro	50, 57
BW8685	Pituitary	Mouse/Jackson	28, 38
BW8883	Pituitary	Mouse/Jackson	28, 38
C1300	Round Cell (Neuroblastoma?)	Jackson Lab Mouse	38
C3HBA	Mammary Adenocarcinoma	Mouse/Jackson	28, 38
C3HIOT ½	Warmary Adenocaromema	Non-human <i>In Vitro</i>	60
C4461	Lung Adenocarcinoma	Mouse	28
C58/J Spontaneous	Leukemia	Mouse	29
CA07/A	Colon Adenocarcinoma	Mouse	29
CA077A	Colon Adenocarcinoma Colon Adenocarcinoma	Mouse	29
CaD1		Mouse/Jackson	29, 38
CaD1	Mammary Adenocarcinoma		29, 36
	Mammary Adenocarcinoma	Mouse Human <i>In Vitro</i>	
CAKI-1	Renal Cell Carcinoma		50, 58
CCO 1865	Mesothelioma	Rat	42
CCO/1923	Hemangiosarcoma	Mouse	29
CCRF-CEM	Leukemia	Human In Vitro	50, 56
CCRF-SB	Leukemia	Human In Vitro	50
CE1460 MACA	Mammary Adenocarcinoma	Mouse	29
CH	Mammary Adenocarcinoma	Mouse	29
CHA-59	Bone, Osteosarcoma	Human In Vitro	50
CHO 1C T6	Normal	Non-human In Vitro	60
COLO 205	Adenocarcinoma	Human <i>In Vitro</i>	50, 56
Colon 26 (C26)	Carcinoma	Mouse	29
Colon 26	Carcinoma	Non-human <i>In Vitro</i>	60
Colon 38	Carcinoma	Mouse	29
C00-G	Mammary Carcinoma	Human	13
COS-G	Lung, Papillary Carcinoma	Human	14
CSE	Fibrosarcoma	Rat	42
CWR-22	Prostate, Adenocarcinoma	Human	16
CX-5	Colon, Adenocarcinoma	Human	14
DAU	Burkitt's Lymphoma	Human	16
DBA/2 Spontaneous	Mammary Adenocarcinoma	Mouse	29
Tumor M114			
dbrB	Anaplastic Carcinoma	Mouse/Jackson	29, 38
DEAC-1	Mucoepidermoid Carcinoma	Human	16
DEL-G	Sarcoma	Human	16
DMBA1	Mammary Adenocarcinoma	Rat	42
DMS-114	Small Cell	Human In Vitro	50
DU-145	Adenocarcinoma	Human In Vitro	50, 58
DU4475	Mammary Carcinoma	Human	13

Dunning Loukomia	At micel Managertic Leukamie	Det	10
Dunning Leukemia	Atypical Monocytic Leukemia	Rat	42
Dunning Leukemia/ NSC-10107 (nitromin)	Atypical Monocytic Leukemia	Rat	43
Dunning Leukemia/ NSC-13875 (HMM)	Atypical Monocytic Leukemia	Rat	43
Dunning Leukemia/ NSC-17261	Atypical Monocytic Leukemia	Rat	43
(benzoquinone)			
Dunning Leukemia/ NSC-23892	Atypical Monocytic Leukemia	Rat	43
(dimethylbenzimidazole)			40
Dunning Leukemia/ NSC-26980 (mitomycin C)	Atypical Monocytic Leukemia	Rat	43
Dunning Leukemia/ NSC-29422 (thioguaposino)	Atypical Monocytic Leukemia	Rat	43
(thioguanosine) Dunning Leukemia/	Atypical Monocytic Leukemia	Rat	43
NSC-3088 (chlorambucil)	Atypical Monocytic Leukeinia	Rai	43
Dunning Leukemia/	Atypical Monocytic Leukemia	Rat	43
NSC-45059 (o-	, kypisai menesyile zeanema		
acetyltetramin)			
Dunning Leukemia/ NSC-51845 (cyclohexylamine)	Atypical Monocytic Leukemia	Rat	43
Dunning Leukemia/ 755	Atypical Monocytic Leukemia	Rat	42
(6-MP)	7 typical Monocytic Ecakernia	rat	72
E Male Gross	Leukemia	Mouse	29
Ehrlich Ascites	Mammary Adenocarcinoma	Mouse	29
Ehrlich Ascites, Tetraploid	Mammary Adenocarcinoma	Mouse	29
Ehrlich Ascites/6-TG (NSC-752)	Mammary Adenocarcinoma	Mouse	29
EKVX	Adenocarcinoma	Human In Vitro	50, 56
EL-4 Male	Lymphoma	Mouse	29
ELL-G	Mammary Carcinoma	Human	13
EMT-6	Mammary Adenocarcinoma	Mouse	29
FB SAR (A)	Fibrosarcoma	Mouse	29
FB SAR (B)	Fibrosarcoma	Mouse	29
FBL-3	Leukemia	Non-human In Vitro	60
Fibrosarcoma	Fibrosarcoma	Hamster	19
Flexner-Jobling	Seminal Vesicle Adenocarcinoma	Rat	43
Fran Tumor	Ovarian Carcinoma	Rat	43
Friend Virus Leukemia (FV01)	Reticulum Cell Sarcoma	Mouse	29
Furth Tumor			
T GITTITOT		Mouse	29

Glioma 261	Glioma	Mouse	29
GOB-G	Colon, Adenocarcinoma	Human	14
Gross Leukemia	Leukemia	Mouse	29
Gross Mammary	Mammary Adenocarcinoma	Mouse	29
Adenocarcinoma			
H-12	Mesothelioma	Hamster	19
H23 (NCI-H23)	Lung, Nonsmall Cell,	Human	14
H2712	Adenocarcinoma	Mouse/Jackson	20.20
H-372	Mammary Adenocarcinoma Leydig	Rat	30, 38
H460 (NCI-H460)	Lung, Nonsmall Cell, Epid.	Human	14
H-540	Leydig	Rat	43
H6	Hepatoma	Mouse/Jackson	30, 38
H-75	Mesothelioma	Hamster	19
Hauschka Ascites	Unknown	Mouse	30
Tumor	Gridiowii	Wodoc	
HB Lynch-Fibroma 522	Fibroma	Rat	43
HCC-2998	Colorectal Carcinoma	Human	14, 56
HCT-116	Adenocarcinoma	Human In Vitro	50, 56
HCT-15	Colon, Carcinoma	Human/Human <i>In</i> <i>Vitro</i>	14,50,56
HE10734	Osteogenic Sarcoma	Mouse	30
HE10734/FR	Osteogenic Sarcoma	Mouse	30
Hepatoma 129 (HE129)	Hepatoma	Mouse	30
Hepatoma 134 (HE134, Shear Hepatoma 134)	Hepatoma	Mouse	30
Hepatoma NK		Rat	43
HIG-G	Mammary Carcinoma	Human	13
HL-60	Pro-myelocytic Leukemia	Human <i>In Vitro</i>	50, 56
HMC	Histiocytoma	Rat	43
H-MESO-1	Lung, Mesothelioma	Human/Human <i>In</i> <i>Vitro</i>	14, 50
H-MESO-1A	Lung, Mesothelioma	Human	14
HOP-18	Large Cell Carcinoma	Human <i>In Vitro</i>	50
HOP-62	Adenocarcinoma	Human <i>In Vitro</i>	50, 56
HOP-92	Large Cell	NCI Panel	56
HS 578T	Adenocarcioma	Human In Vitro	50, 57
HS 913T	Mixed Cell	Human In Vitro	50
HT-29	Adenocarcinoma	Human In Vitro	50, 56
IGR-OV1	Adenocarcinoma	Human In Vitro	50, 57
IRS 9802	Spindle Cell Sarcoma	Rat	44
Iglesias	Ovarian Carcinoma	Rat	44
J-30237	Unknown	Mouse	30
K-562	Leukemia	Human In Vitro	50, 56
Klein Tumor (TA3)	Mammary Adenocarcinoma	Mouse	30
KLO-G	Colon, Adenocarcinoma	Human	14
KM 20L2 (derivative of	Colon, Adenocarcinoma	Human	14

HT-29) Adenocarcinoma Human <i>In Vitro</i>	50
KM-12 Adenocarcinoma Human In Vitro !	
Krebs 2 Carcinoma Carcinoma of Inquinal Region Mouse	50, 56
ŭ ŭ	30
	30
(1 1)	44
	30
	30
19893)	30
	26, 30
L1210/Anhydro-Ara C Lymphoid Leukemia Mouse (NSC-145668)	31
L1210/Ara-C (NSC- Lymphoid Leukemia Mouse 2 63878)	26, 31
	26, 31
	31
	26, 31
	26, 30
	30
	30
	31
	31
	31
L1210/Ftorafur (NSC- Lymphoid Leukemia Mouse 3 148958)	31
L1210/HU (NSC-32065) Lymphoid Leukemia Mouse 2	26, 30
L1210/L-PAM (NSC- Lymphoid Leukemia Mouse 28806)	26, 30
L1210/M-773 Lymphoid Leukemia Mouse 3	31
	30
	30
L1210/NSC-19622 Lymphoid Leukemia Mouse 3	30
L1210/NSC-38280 Lymphoid Leukemia Mouse 3	30
L1210/TIC (NSC- Lymphoid Leukemia Mouse 3 60339)	31
	26, 30
L18464 Lymphoma Mouse	31

L4946	Lymphocytic Leukemia	Mouse	31
LAF ₁	Adrenal Cortical Adenocarcinoma	Mouse	31
LC-12	Pulmonary Squamous Cell Carcinoma	Mouse	31
LC-18	Hepatocarcinoma	Rat	44
Lewis Lung	Carcinoma	Mouse	31
Lewis Lung/PALA (NSC-224131)	Carcinoma	Mouse	31
Lewis Sarcoma T241	Pleiomorphic	Mouse	31
LLC-Luc-GFP (LL-LUC-POL2)	Lung Squamous Cell Carcinoma	Mouse	31
LOVO	Adenocarcinoma	Human In Vitro	50
LOVO I	Colon, Adenocarcinoma	Human	15
LOVO II	Colon, Adenocarcinoma	Human	15
LOX IMVI	Amelanotic Melanoma	Human In Vitro	50, 57
LPC-1	Plasmacytoma	Mouse	31
LS402AX	Teratosarcoma	Mouse	32
LSTRA	Lymphosarcoma	Mouse	32
LSTRA/DTIC (NSC- 45388)	Lymphosarcoma	Mouse	32
LX-1	Lung, Undifferentiated Carcinoma	Human	14
LXFL 529	Lung, Large Cell Carcinoma	Human In Vitro	
Lymphosarcoma	Lymphosarcoma	Hamster	19
M14	Amelanotic Melanoma	Human In Vitro	51, 57
M19-MEL	Amelanotic Melanoma	Human In Vitro	51
M5076	Reticulum Cell Sarcoma	Mouse/Non-Human In Vitro	32, 60
M5076/cis-DDP (NSC- 119875)	Reticulum Cell Sarcoma	Mouse	32
M5076/HMM (NSC- 13875)	Reticulum Cell Sarcoma	Mouse	32
M5076/L-PAM (NSC- 8806)	Reticulum Cell Sarcoma	Mouse	32
M5480	Testicular Carcinoma (Seminoma)	Mouse	32
MA13C	Mammary Adenocarcinoma	Mouse	32
MA387	Fusiform Cell Sarcoma	Mouse	32
MADB 106		Non-human In Vitro	60
MALME-3M	Melanoma	Human In Vitro	51, 57
MAMF2-TC	Fibrosarcoma	Rat	44
MC-11	Mammary Adenocarcinoma	Mouse	32
MC-5	Mammary Adenocarcinoma	Mouse	32
MC-6 Female	Mammary Adenocarcinoma	Mouse	32
MCF7	Mammary Carcinoma	Human/Human In	13,51,57
	Ivianimary carementa	Vitro	
MCS-1	Mammary Adenocarcinoma	Vitro Mouse	32
MCS-1 MDA-MB-231			32 51, 57

MDA-MB-436	Mammary Carcinoma	Human	13
MDA-MB-468	Mammary Adenocarcinoma	Human In Vitro	51, 57
Mecca (ME61, MLS)	Lymphosarcoma	Mouse	32
Melanoma	Melanotic Melanoma	Hamster	19
MET 149-2	Adenocarcinoma	Rat	44
METH-A	Sarcoma	Mouse	32
MLS		Mouse	32
MNU-Buffalo	Mammary Carcinoma	Rat	44
Moloney Sarcoma (SV-	Sarcoma	Mouse	32
122-TR4)			
MOLT-4	Leukemia	Human <i>In Vitro</i>	51, 56
MOPC-104	Plasmacytoma	Mouse	32
MOPC-112	Plasmacytoma	Mouse	32
MOPC-113	Plasmacytoma	Mouse	32
MOPC-114	Plasmacytoma	Mouse	32
MOPC-116	Plasmacytoma	Mouse	32
MOPC-118	Plasmacytoma	Mouse	32
MOPC-121	Plasmacytoma	Mouse	32
MOPC-123	Plasmacytoma	Mouse	32
MOPC-129	Plasmacytoma	Mouse	32
MOPC-132	Plasmacytoma	Mouse	32
MOPC-140	Plasmacytoma	Mouse	33
MOPC-141	Plasmacytoma	Mouse	33
MOPC-157	Plasmacytoma	Mouse	33
MOPC-17	Plasmacytoma	Mouse	33
MOPC-172	Plasmacytoma	Mouse	33
MOPC-173	Plasmacytoma	Mouse	33
MOPC-209	Plasmacytoma	Mouse	33
MOPC-21	Plasmacytoma	Mouse	33
MOPC-28	Plasmacytoma	Mouse	33
MOPC-30	Plasmacytoma	Mouse	33
MOPC-31	Plasmacytoma	Mouse	33
MOPC-4	Plasmacytoma	Mouse	33
MOPC-41	Plasmacytoma	Mouse	33
MOPC-46	Plasmacytoma	Mouse	33
MOPC-47	Plasmacytoma	Mouse	33
MOPC-48	Plasmacytoma	Mouse	33
MOPC-49	Plasmacytoma	Mouse	33
MOPC-51	Plasmacytoma	Mouse	33
MOPC-61	Plasmacytoma	Mouse	33
MOPC-63	Plasmacytoma	Mouse	33
MOPC-67	Plasmacytoma	Mouse	33
MOPC-69	Plasmacytoma	Mouse	33
MOPC-70	Plasmacytoma	Mouse	33
MOPC-78	Plasmacytoma	Mouse	33
MOPC-78		Mouse	33
IVIUFU-00	Plasmacytoma	I Mouse	33

MOPC-91	Plasmacytoma	Mouse	33
MOPC-96	Plasmacytoma	Mouse	33
MOPC-99	Plasmacytoma	Mouse	33
MPC-1	Plasmacytoma	Mouse	33
MPC-11	Myeloma	Non-human <i>In Vitro</i>	60
MPC-15	Plasmacytoma	Mouse	33
MPC-2	Plasmacytoma	Mouse	33
MPC-25	Plasmacytoma	Mouse	33
MPC-26	Plasmacytoma	Mouse	34
MPC-31	Plasmacytoma	Mouse	34
MPC-36	Plasmacytoma	Mouse	34
MPC-37	Plasmacytoma	Mouse	34
MPC-40	Plasmacytoma	Mouse	34
MPC-42	Plasmacytoma	Mouse	34
MPC-44	Plasmacytoma	Mouse	34
MPC-48	Plasmacytoma	Mouse	34
MPC-49	Plasmacytoma	Mouse	34
MPC-59	Plasmacytoma	Mouse	34
MPC-60	·	Mouse	34
MPC-63	Plasmacytoma	Mouse	34
MPC-64	Plasmacytoma		
	Plasmacytoma	Mouse	34
MPC-67	Plasmacytoma	Mouse	
MPC-73	Plasmacytoma	Mouse	34
MPC-H	Plasmacytoma	Mouse	34
MRI-H-121	Kidney, Carcinoma	Human	16
MRI-H-121B	Melanoma, Malignant	Human	15
MRI-H-147	Endometrium, Carcinoma, Müllerian Duct	Human	16
MRI-H-166	Kidney, Transitional Cell Carcinoma	Human	16
MRI-H-177	Cervix, Squamous Cell Carcinoma	Human	15
MRI-H-1834	Ovarian Carcinoma	Human	16
MRI-H-186	Cervix, Invasive, Large Cell, Nonkeratinizing, Squamous Cell Carcinoma	Human	15
MRI-H-187	Melanoma, Epitheloid, Melanotic	Human	15
MRI-H-194	Colon, Adenocarcinoma	Human	14
MRI-H-196	Cervix, Poorly Differentiated Squamous Cell Carcinoma	Human	15
MRI-H-215	Cervix, Invasive, Large Cell, Nonkeratinizing, Poorly Differentiated, Epidermoid Carcinoma	Human	15
MRI-H-220	Endometrium, Carcinoma	Human	16
MRI-H-221	Melanoma, Malignant	Human	15
MRI-H-250	Colon, Carcinoma	Human	15
MRI-H-255	Melanoma	Human	15
MRI-H-258	Ovarian Adenocarcinoma	Human	16
MRI-H-273	Ovarian Carcinoma	Human	16

MS-2	Sarcoma	Mouse	34
MST	Mast Cell	Mouse	34
MtT	Anterior Pituitary	Rat	44
Murphy-Sturm Lymphosarcoma (MSL)	Lymphosarcoma	Rat	44
MX-1	Mammary Carcinoma	Human/Human <i>In</i> <i>Vitro</i>	13, 51
MXT	Mammary Ductal	Mouse	34
NBW-37	T Cell Lymphoma	Rat	44
NC-37	Normal	Human In Vitro	51
NCI-293TT	Kidney	NIH Licensed Cell Lines	51, 54
NCI/ADR-RES	Ovarian Adenocarcinoma	Human <i>In Vitro</i>	51, 57
NCI-CHOdeltafurin	Ovarian	Hmster	19, 54
NCI-H1284	Adenocarcinoma	NIH Licensed Cell Lines	54
NCI-H1299	Adenocarcinoma	Human <i>In Vitro</i> /NIH Licensed	51, 54
NCI-H1395	Adenocarcinoma	NIH Licensed Cell Lines	54
NCI-H1435	Adenocarcinoma	NIH Licensed Cell Lines	54
NCI-H1437	Adenocarcinoma	NIH Licensed Cell Lines	54
NCI-H1568	Adenocarcinoma	NIH Licensed Cell Lines	54
NCI-H1944	Adenocarcinoma	NIH Licensed Cell Lines	54
NCI-H1993	Adenocarcinoma	NIH Licensed Cell Lines	54
NCI-H226	Squamous Cell	NIH Licensed Cell Lines	54, 57
NCI-H23	Adenocarcinoma	NIH Licensed Cell Lines	54, 56
NCI-H2887	Adenocarcinoma	Human <i>In Vitro</i> /NIH Licensed Cell Lines	51, 54
NCI-H3122	Adenocarcinoma	Human <i>In Vitro</i> /NIH Licensed Cell Lines	51, 54
NCI-H322M	Adenocarcinoma	Human <i>In Vitro</i> /NIH Licensed Cell Lines	51,54,57
NCI-H3255	Adenocarcinoma	Human In Vitro/NIH Licensed Cell Lines	51, 54
NCI-H358M	Bronchiolo-Alveolar Carcinoma	Human In Vitro/NIH Licensed Cell Lines	51, 54
NCI-H460	Large Cell	Human In Vitro/NIH Licensed Cell Lines	51,54,57
NCI-H522	Adenocarcinoma	Human <i>In Vitro</i> /NIH Licensed Cell Lines	51,54,57

NCI-H69	Small Cell Carcinoma	Human In Vitro	51
	l .		51
NCI-H82	Small Cell Carcinoma	Human In Vitro	
NCI-H838	Adenocarcinoma	Human <i>In Vitro</i> /NIH Licensed Cell Lines	51, 54
NIS-G	Melanosarcoma	Human	15
Novikoff Hepatoma	Hepatoma	Rat	44
NS104	Rhabdomyosarcoma	Rat	44
OGL-G	Sarcoma, Spindle Cell, Periosteal Osteogenic	Human	16
OR-16-3	Thymus Tumor	Rat	44
OVCAR-3	Adenocarcinoma	Human <i>In Vitro</i>	51, 57
OVCAR-4	Adenocarcinoma	Human <i>In Vitro</i>	51, 57
OVCAR-5	Adenocarcinoma	Human <i>In Vitro</i>	51/57
OVCAR-8	Adenocarcinoma	Human <i>In Vitro</i>	51, 58
P1534	Lymphocytic Leukemia	Mouse	35
P1798	Lymphosarcoma	Mouse	35
P1798/CR-JS	Lymphoma	Mouse	35
P1798/CS-JS	Lymphoma	Mouse	35
P288	Lymphocytic Leukemia	Mouse	34
P288/MTX (NSC-740)	Lymphocytic Leukemia	Mouse	34
P388	Lymphocytic Leukemia	Mouse/ Non-human	34, 60
		In Vitro	·
P388/5-Azacytidine (NSC-102816)	Lymphocytic Leukemia	Mouse	26, 35
P388/5FU (NSC-19893)	Lymphocytic Leukemia	Mouse	26, 34
P388/Acivicin (NSC- 163501)	Lymphocytic Leukemia	Mouse	35
P388/ActinomycinD (NSC-3053)	Lymphocytic Leukemia	Mouse	26, 34
P388/ADR (NSC 123127)	Lymphocytic Leukemia	Mouse	26, 35
P388/ADR	Leukemia	Non-human In Vitro	60
P388/Ara-A + 2'dcF (NSC-404241 + NSC- 218321)	Lymphocytic Leukemia	Mouse	27, 35
P388/Ara-C (NSC- 63878)	Lymphocytic Leukemia	Mouse	34
P388/BCNU (NSC- 409962)	Lymphocytic Leukemia	Mouse	27, 35
P388/Daunomycin (NSC-82151)	Lymphocytic Leukemia	Mouse	34
P388/DON (NSC-7365)	Lymphocytic Leukemia	Mouse	34
P388/L-Alanosine (NSC-153353)	Lymphocytic Leukemia	Mouse	35
P388/L-PAM (NSC- 8806)	Lymphocytic Leukemia	Mouse	26, 34
P388/Mitoxantrone	Lymphocytic Leukemia	Mouse	35

P388/MTX (NSC-740)	(NSC-301739)			
P3563 Mast Cell Leukemia Mouse 35		Lymphocytic Leukemia	Mouse	26 34
P815 (Hageman Mast Cell Leukemia Mouse 35				<u> </u>
Mastocytoma) Wast Cell Leukemia Mouse 35 Pan #1 (Fortner) Pancreatic Duct Adenocarcinoma Hamster 19 PAN 02 Pancreas Adenocarcinoma Mouse/ Non-human In Vitro 35, 60 PC-3 Carcinoma Human In Vitro 51, 58 PC-3/M Carcinoma Human In Vitro 51 PR15E175 Lymphoid Leukemia Mouse 35 PR15E175 Lymphoid Leukemia Mouse 35 PR15E176/NSC-45388 Lymphoid Leukemia Mouse 35 R26 Unknown Mouse 35 R-26 Unknown Mouse 35 R-26 Unknown Mouse 35 R-27 Prostate Rat 44 R3327 Prostate Rat 44 R3327 Prostate Rat 44 R35 Mammary Adenocarcinoma Rat 44 R46 Unknown Mouse 35 R-74 Unknown Mouse 36		Mast Cell Leukemia		
P815/VLB (NSC-49842) Mast Cell Leukemia Mouse 35 Pan #1 (Fortner) Pancreatic Duct Adenocarcinoma Hamster 19 PAN 02 Pancreas Adenocarcinoma Mouse Non-human 35, 60 PC-3 Carcinoma Human In Vitro 51, 58 PC-3/M Carcinoma Human In Vitro 51 PR1C1T5/NSC-45388 Lymphoid Leukemia Mouse 35 PR1SE1T5 Lymphoid Leukemia Mouse 35 PR1SE1T5/NSC-45388 Lymphoid Leukemia Mouse 35 R-26 Unknown Mouse 35 R-26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3327 Prostate Rat 44 R355 Mammary Adenocarcinoma Rat 44 R4-6 Unknown Mouse 35 R-53 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 35 R-74 Unknown Mouse 35 R-74 Unknown Rat 44 R16-6 Unknown Rat 44 R17-7 R-74 Rat Rat 44 R18-7 R-74 Rat Rat 44 R18-7 R-74 Rat Rat 44 R18-7 R-74 Rat Rat Rat Rat R-74 R-74 Rat Rat Rat Rat Rat R-74 R-74 Rat Rat Rat Rat Rat R-74 Rat Rat Rat Rat Rat Rat R-74 Rat Rat Rat Rat Rat Rat Rat R-74 Rat Rat Rat Rat Rat Rat Rat Rat R-74 Rat Ra		Maet een Leanenna	Widada	
Pan #1 (Fortner) Pancreas Duct Adenocarcinoma Hamster 19 PAN 02 Pancreas Adenocarcinoma Mouse/ Non-human In Vitro 35, 60 PC-3 Carcinoma Human In Vitro 51, 58 PC-3/M Carcinoma Human In Vitro 51 PR15E1T5 Lymphoid Leukemia Mouse 35 PR15E1T5 Lymphoid Leukemia Mouse 35 PR15E1T5/NSC-45388 Lymphoid Leukemia Mouse 35 PR15E1T5/NSC-45388 Lymphoid Leukemia Mouse 35 R26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3259 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R3327 (Pap) Prostate Rat 44 R3327 (Pap) Prostate Rat 44 R3327 (Pap) Prostate Rat 44 R4-6 Unknown Mouse 35 R-74 (Unknown Mouse 35		Mast Cell Leukemia	Mouse	35
PAN 02 Pancreas Adenocarcinoma Mouse/ Non-human In Vitro 35, 60 PC-3 Carcinoma Human In Vitro 51, 58 PC-3/M Carcinoma Human In Vitro 51 PR15C1T5/NSC-45388 Lymphoid Leukemia Mouse 35 PR1SE1T5 Lymphoid Leukemia Mouse 35 PR1SE1T5/NSC-45388 Lymphoid Leukemia Mouse 35 R-26 Unknown Mouse 35 R-26 Unknown Mouse 35 R-26 Unknown Rat 44 R33279 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R3327 Prostate Rat 44 R35 Mammary Adenocarcinoma Rat 44 R-33 Unknown Mouse 35 R-53 Unknown Mouse 35 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Rat 44		<u> </u>		
In Vitro				
PC-3/M Carcinoma Human In Vitro 51 PR1CTTS/INSC-45388 Lymphoid Leukemia Mouse 35 PR1SE1T5 Lymphoid Leukemia Mouse 35 R71SE1T5/INSC-45388 Lymphoid Leukemia Mouse 35 R-26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3259 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R335 Mammary Adenocarcinoma Rat 44 R35 Mammary Adenocarcinoma Rat 44 R4-6 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 36 RBL-5 (Rauscher Virus Leukemia Mouse 36 RBL-5 (Rauscher Virus Leukemia Mouse 36 Rice 500 Leydig Rat 44 Rie-Jalen Tumor Thymoma Mouse 36 Rice 500 <td></td> <td></td> <td>I</td> <td></td>			I	
PC-3/M Carcinoma Human In Vitro 51 PR1CTT5/NSC-45388 Lymphoid Leukemia Mouse 35 PR1SE1T5 Lymphoid Leukemia Mouse 35 PR1SE1T5/NSC-45388 Lymphoid Leukemia Mouse 35 R-26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3259 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R355 Mammary Adenocarcinoma Rat 44 R355 Mammary Adenocarcinoma Rat 44 R4-6 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 36 RBL-5 (Rauscher Virus Leukemia Mouse 36 RBL-5 (Rauscher Virus Leukemia Mouse 36 RBL-5 (Rauscher Virus Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36	PC-3	Carcinoma	Human In Vitro	51, 58
PR1SE1T5 Lymphoid Leukemia Mouse 35 PR1SE1T5/NSC-45388 Lymphoid Leukemia Mouse 35 R-26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3259 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R3327 (Pap) Prostate Rat 44 R355 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 35 R-74 Unknown Mouse 35 RBL-5 (Rauscher Virus Leukemia Mouse 36 Rice 50 (Rauscher Virus Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice 500 Leydig Rat 44 Rice 500 Leydig R	PC-3/M	Carcinoma	Human <i>In Vitro</i>	
PR1SE1T5 Lymphoid Leukemia Mouse 35 PR1SE1T5/NSC-45388 Lymphoid Leukemia Mouse 35 R-26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3259 Giant Cell Sarcoma Rat 44 R3257 Prostate Rat 44 R3327 (Pap) Prostate Rat 44 R335 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 35 RRL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice 500 Leydig Rat 44 Rice 50 Pheochromocytoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC-29	PR1C1T5/NSC-45388	Lymphoid Leukemia	Mouse	35
PR1SE1T5/NSC-45388 Lymphoid Leukemia Mouse 35 R-26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3259 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R335 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 35 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Reif-Sallen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice 506 Leydig Rat 44 Rice 509 Pheochromocytoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNC-16 <	PR1SE1T5		Mouse	35
R-26 Unknown Mouse 35 R3149 Leukemia Rat 44 R3259 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R3327 (Pap) Prostate Rat 44 R335 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-74 Unknown Mouse 35 RBL-5 (Rauscher Virus Induced Transplantable Leukemia Mouse 36 Rice 50 (Rauscher Virus Induced Transplantable Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice 500 Leydig Rat 44 Rice 50 Pheochromocytoma Rat 44 RNC 259 Pheo	PR1SE1T5/NSC-45388		Mouse	35
R3259 Giant Cell Sarcoma Rat 44 R3327 Prostate Rat 44 R35 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 36 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice D6 Leydig Rat 44 Rice D6 Leydig Rat 44 Rice D6 Pheochromocytoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma	R-26		Mouse	35
R3327 Prostate Rat 44 R3327 (Pap) Prostate Rat 44 R35 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice 500 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 56	R3149	Leukemia	Rat	44
R3327 (Pap) Prostate Rat 44 R35 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice 500 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RRC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 56 RXF 631	R3259	Giant Cell Sarcoma	Rat	44
R35 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 36 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Rice 500 Leydig Rat 44 Rice 500 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPPI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 56 RXF 631 Renal Cell Carcinoma Jackson Lab Mouse 36, 38	R3327	Prostate	Rat	44
R35 Mammary Adenocarcinoma Rat 44 R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 36 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Rice 500 Leydig Rat 44 Rice 500 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPPMI-821 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 56 RXF 631 Renal Cell Carcinoma Human In Vitro 51, 58	R3327 (Pap)	Prostate	Rat	44
R-46 Unknown Mouse 35 R-53 Unknown Mouse 35 R-74 Unknown Mouse 35 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice D6 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPPMI-7951 Melanoma Human <i>In Vitro</i> 51 56 RXF 393 Renal Cell Carcinoma Human <i>In Vitro</i> 51 58 RXF 631 Renal Cell Carcinoma Human <i>In Vitro</i> 51 58 RXF 631 Renal Cell	R35	Mammary Adenocarcinoma	Rat	44
R-74 Unknown Mouse 35 RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice D6 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Jackson Lab Mouse 36 S180 Pleomorphic Sarcoma Jackson Lab	R-46		Mouse	35
RBL-5 (Rauscher Virus Induced Transplantable Tumor-5) Leukemia Mouse 36 Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice D6 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNC 288 Insylinoma Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 58 <td>R-53</td> <td>Unknown</td> <td>Mouse</td> <td>35</td>	R-53	Unknown	Mouse	35
Induced Transplantable Tumor-5 Reif-Allen Tumor	R-74	Unknown	Mouse	35
Tumor-5) Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice D6 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 56 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 36 S37 Pleomorphic Cell Mouse/Jackson 36, 38 S91 Melanoma (Melanotic)	RBL-5 (Rauscher Virus	Leukemia	Mouse	36
Reif-Allen Tumor Thymoma Mouse 36 Rice 500 Leydig Rat 44 Rice D6 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 36 S37 Pleomorphic Sarcoma Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse<	Induced Transplantable			
Rice 500 Leydig Rat 44 Rice D6 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 36 S37 Pleomorphic Sarcoma Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 36 Sa D2 Fibrosarcoma Mouse/Jackso	,			
Rice D6 Leydig Rat 44 Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 36 Sa 1 Spindle Cell Carcinoma Mouse/Jackson 36, 38		· · ·		
Riejoel Thyroid Adenocarcinoma Rat 44 RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 36 Sa 1 Spindle Cell Carcinoma Mouse/Jackson 36, 38 Sa D2 Fibrosarcoma Mouse/Jackson 36, 38	Rice 500	, , , , , , , , , , , , , , , , , , , 	Rat	
RNC 259 Pheochromocytoma Rat 44 RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 38 Sa 1 Spindle Cell Carcinoma Mouse/Jackson 36, 38 Sa D2 Fibrosarcoma Mouse/Jackson 36, 38				
RNC 288 Insylinoma Rat 44 RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse 36 S37 Pleomorphic Sarcoma Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 38 Sa 1 Spindle Cell Carcinoma Mouse/Jackson 36, 38 Sa D2 Fibrosarcoma Mouse/Jackson 36, 38	Riejoel	Thyroid Adenocarcinoma	Rat	44
RNK-16 LGL Leukemia Rat 44 RPC-20 Plasmacytoma Mouse 36 RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse 36 S37 Pleomorphic Sarcoma Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 38 Sa 1 Spindle Cell Carcinoma Mouse 36 Sa D2 Fibrosarcoma Mouse/Jackson 36, 38				
RPC-20PlasmacytomaMouse36RPC-5PlasmacytomaMouse36RPC-9PlasmacytomaMouse36RPMI-7951MelanomaHuman In Vitro51RPMI-8226LeukemiaHuman In Vitro51, 56RXF 393Renal Cell CarcinomaHuman In Vitro51, 58RXF 631Renal Cell CarcinomaHuman In Vitro51S180Pleomorphic SarcomaJackson Lab Mouse38S180 (Crocker, S III)Pleomorphic CellMouse36S37Pleomorphic SarcomaMouse/Jackson36, 38S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				
RPC-5 Plasmacytoma Mouse 36 RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse 36 S37 Pleomorphic Sarcoma Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 38 Sa 1 Spindle Cell Carcinoma Mouse 36 Sa 2 Fibrosarcoma Mouse/Jackson 36, 38		·		
RPC-9 Plasmacytoma Mouse 36 RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse 36 S37 Pleomorphic Sarcoma Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 38 Sa 1 Spindle Cell Carcinoma Mouse 36 Sa 1 Fibrosarcoma Mouse 36 Sa D2 Fibrosarcoma Mouse/Jackson 36, 38				
RPMI-7951 Melanoma Human In Vitro 51 RPMI-8226 Leukemia Human In Vitro 51, 56 RXF 393 Renal Cell Carcinoma Human In Vitro 51, 58 RXF 631 Renal Cell Carcinoma Human In Vitro 51 S180 Pleomorphic Sarcoma Jackson Lab Mouse 38 S180 (Crocker, S III) Pleomorphic Cell Mouse 36 S37 Pleomorphic Sarcoma Mouse/Jackson 36, 38 S91 Melanoma (Melanotic) Jackson Lab Mouse 38 Sa 1 Spindle Cell Carcinoma Mouse 38 Sa 1 Fibrosarcoma Mouse/Jackson 36, 38				
RPMI-8226LeukemiaHuman In Vitro51, 56RXF 393Renal Cell CarcinomaHuman In Vitro51, 58RXF 631Renal Cell CarcinomaHuman In Vitro51S180Pleomorphic SarcomaJackson Lab Mouse38S180 (Crocker, S III)Pleomorphic CellMouse36S37Pleomorphic SarcomaMouse/Jackson36, 38S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				
RXF 393Renal Cell CarcinomaHuman In Vitro51, 58RXF 631Renal Cell CarcinomaHuman In Vitro51S180Pleomorphic SarcomaJackson Lab Mouse38S180 (Crocker, S III)Pleomorphic CellMouse36S37Pleomorphic SarcomaMouse/Jackson36, 38S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38		I .		
RXF 631Renal Cell CarcinomaHuman In Vitro51S180Pleomorphic SarcomaJackson Lab Mouse38S180 (Crocker, S III)Pleomorphic CellMouse36S37Pleomorphic SarcomaMouse/Jackson36, 38S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				1
S180Pleomorphic SarcomaJackson Lab Mouse38S180 (Crocker, S III)Pleomorphic CellMouse36S37Pleomorphic SarcomaMouse/Jackson36, 38S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				
S180 (Crocker, S III)Pleomorphic CellMouse36S37Pleomorphic SarcomaMouse/Jackson36, 38S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				
S37Pleomorphic SarcomaMouse/Jackson36, 38S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				
S91Melanoma (Melanotic)Jackson Lab Mouse38Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				_
Sa 1Spindle Cell CarcinomaMouse36Sa D2FibrosarcomaMouse/Jackson36, 38				
Sa D2 Fibrosarcoma Mouse/Jackson 36, 38				
Sal Spindle-Cell Sarcoma Jackson Lab Mouse 38		-		
	Sal	Spindle-Cell Sarcoma	Jackson Lab Mouse	38

SB #1 (Fortner)	Small Bowel Adenocarcinoma	Hamster	19
SF-268	Glioblastoma	Human In Vitro	52, 56
SF-295	Glioblastoma	Human	16, 56
SF-539	Gliobastoma	Human In Vitro	52, 56
Shear Hepatoma 134		Mouse	36
SHP-77	Small Cell Carcinoma	Human In Vitro	52
SJL/JW	Reticulum Cell Sarcoma	Mouse	36
SK-MEL-2	Melanoma	Human In Vitro	52, 57
SK-MEL-28	Melanoma	Human In Vitro	52, 57
SK-MEL-5	Melanoma	Human In Vitro	52, 57
SK-MES-1	Squamous Cell Carcinoma	Human In Vitro	52
SK-OV-3	Adenocarcinoma	Human In Vitro	52, 58
SMT-2A	Mammary Carcinoma	Rat	44
SN12A1	Renal Cell Carcinoma	Human In Vitro	52
SN12C	Renal Cell Carcinoma	Human In Vitro	52, 58
SN12K1	Renal Cell Carcinoma	Human In Vitro	52
SN12L1	Renal Cell Carcinoma	Human In Vitro	52
SN12S1	Renal Cell Carcinoma	Human In Vitro	52
SNB-19	Glioblastoma	Human <i>In Vitro</i>	52, 56
SNB-7	Glioblastoma	Human In Vitro	52, 30
SNB-75	Glioblastoma	Human <i>In Vitro</i>	52, 56
SNB-78	Astrocytoma	Human In Vitro	52, 30
Spontaneous Mammary	Mammary Adenocarcinoma	Mouse	36
Spontaneous Adrenal	Adrenal	Mouse	36
Spontaneous DBA/2	Mammary Adenocarcinoma	Mouse	36
Mammary	Marillary Adenocarcinoma	Mouse	30
SR	Lymphoma	Human In Vitro	52, 56
SV-122-TR4	Lymphoma	Mouse	36
SW-613	Mammary Carcinoma	Human	13
SW-620	Adenocarcinoma	Human <i>In Vitro</i>	52, 56
SWA-G	Ovarian Carcinoma	Human	16
Swarm	Chondrosarcoma	Rat	44
T1699	Mammary Adenocarcinoma	Mouse/Jackson	36, 38
T1703	Mammary Adenocarcinoma	Mouse/Jackson	36, 38
T-47D (not to or for	Mammary	Human In Vitro	52, 57
commercial use)	Warmary	Traman // Vitro	02, 07
TG1-4	Mesothelioma	Hamster	19
TK-10	Renal Cell Carcinoma	Human In Vitro	52, 58
TR.CLXXXVIII	Melanoma	Rat	44
TR.DCCXLIII	Pituitary	Rat	44
TRI-G	Melanoma	Human	15
TS1-4	Epidermoid Carcinoma	Hamster	19
U-251	Glioblastoma	Human <i>In Vitro</i>	52, 56
UACC-257	Melanoma	Human In Vitro	52, 57
UACC-62	Melanoma	Human <i>In Vitro</i>	52, 57
UCSD 242L	Melanoma	Human In Vitro	52, 37
000D Z4ZL	IVICIAITOITIA	Tidiliali III VILIO	JZ

UCSD 354L	Melanoma	Human In Vitro	52
UO-31	Renal Cell Carcinoma	Human In Vitro	52, 58
VAN-G	Mammary Carcinoma	Human	13
VX-2 (V2)	Skin Carcinoma	Non-human In Vitro	60
WIDR (derivative of HT-	Adenocarcinoma	Human In Vitro	52
29)			
WIL-G	Melanoma	Human	15
X5563	Unknown	Mouse	36
XF 498	Glioblastoma	Human In Vitro	52
YAC	Lymphoma	Non-human In Vitro	60
Yoshida Hepatoma	Hepatoma	Rat	44
Yoshida Sarcoma	Sarcoma	Rat	44
YPC-1	Plasmacytoma	Mouse	36
Zimmerman		Mouse	36
Ependymoblastoma			