Flow Laboratories, Inc.

Product Catalog I

Products of Flow Laboratories and Linbro Scientific, including Titertek®/Linbro® microtitration equipment and Linbro® plastic tissue culture labware.

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Information for Ordering

IMPORTANT — We are in a label change-over program in which we list both "old" catalog number and "new" catalog number. "New" catalog numbers will appear at such time as the inventory of "old" catalog number labeled products is depleted.

Index lists products alphabetically and by new catalog numbers.

Please order by new number.

Placing Your Order — Both mail and telephone orders are invited. Please confirm telephone orders in writing within two business days; mark such orders "CONFIRMING"

Include a purchase order number, reference quotation number and identify items by using both catalog number and product description. Please specify both a shipping address and a billing address.

Ordering Addresses —
For the Western United States (Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming) order from:

Flow Laboratories, Inc.
Subsidiary of Flow General Inc.
936 West Hyde Park Boulevard
Inglewood, California 90302
Telephone: 213-674-2700
Telex: 653439 Flowlab Inw

All other states, Puerto Rico, and the District of Columbia, order from:

Flow Laboratories, Inc.
Subsidiary of Flow General Inc.
1710 Chapman Avenue
Rockville, Maryland 20852
Telephone: 301-881-2900
Telex: 898358 Flowlab Rove

In Canada, order from:
Flow Laboratories, Inc.
Subsidiary of Flow General Inc.
1625 Sismet Road, Unit 10
Mississauga, Ontario, Canada L4W, 1V6
Telephone: 416-624-0740
Telex: 069-60164

Linbro product orders can be sent to any Flow Laboratories office, Linbro distributor or:
Linbro Scientific, Inc.
Subsidiary of Flow Laboratories, Inc.
143 Leeder Hill Drive
P.O. Box 6187
Hamden, Connecticut 06517
Telephone: 203-281-6371
Telex: 963530

All animal orders should be sent to:
Flow Laboratories, Inc.
Subsidiary of Flow General Inc.
P.O. Box 1065
Dublin, Virginia 24084
Telephone: 703-674-4148

For other geographic areas throughout the world, contact your nearest Flow Laboratories office (see inside back cover) for instructions as to where the order should be sent. In many instances, you may be referred to a Flow Laboratories distributor, who can *serve you.*

See separate price list for prices.

Quantity Discounts — For quantities greater than listed, please send your requirements to Customer Service Department for quotation.

Payment Terms — Net 30 days.

Payment Address —
Flow Laboratories, Inc.
Subsidiary of Flow General Inc.
7655 Old Springhouse Road
McLean, Virginia 22101

Shipments — All shipments are f.o.b. shipping point with the method of routing determined by Flow Laboratories. Where special handling is requested by the customer, the customer will pay the differential between normal shipping charges and the special handling charges. Shipments of perishable items are made only on Sunday, Monday, Tuesday, and Wednesday, unless otherwise specifically requested by the customer.

Time of Delivery — For routinely produced and inventoried products normal delivery is 5 to 14 days from receipt of order.

Standing Orders — Standing orders are accepted. In the event the total order is not completed and it affects the per unit price, we reserve the right to bill the customer the difference between the standing order price and the normal price of the quantity actually shipped.

Merchandise Return — We require written authorization for all materials to be returned. When requesting authorization please include your purchase order number, our invoice number, name of product, catalog and lot number.

If the reason for return is not the fault of Flow Laboratories, there is a 20% restocking charge based on original invoice price plus freight, or a minimum of $10.00 whichever is greater.

Claims for damaged merchandise should be filed with the carrier by the customer.

Warranty — All sales are made without any seller's warranty or representation, expressed, implied or statutory. No claims or repairs beyond replacement of unacceptable material or equipment, confirmed by Flow Laboratories, or refund of purchase price shall be honored.

For information or questions regarding product performance, contact the Technical Services Manager in Rockville, Maryland, Customer Service in Inglewood, California or Customer Service in Mississauga, Ontario, Canada. Animal inquiries should be directed to Customer Service in Dublin, Virginia.

Prices and products subject to change without notice.

Special Services

Order Assistance — For order assistance contact Customer Service at Rockville, Md., Ontario, Canada, or Inglewood, Calif. locations. For Linbro products, contact the previous locations or Customer Service in Hamden, Conn. For animals, contact Customer Service in Dublin, Va.

Quotations — Upon request, prices are quoted in writing for single shipments, standing orders, or animal contracts. To order from an accepted price quotation, it is essential to reference the price quotation number to avoid pricing or shipping errors.

Product Information —
For product or technical information contact the Technical Services Manager in Rockville, Md., or Customer Service in Inglewood, Calif.

Lot Reservation Policy *(Please read carefully)*

Flow Laboratories, whenever possible, will hold on reserve routinely produced cell culture media and sera for periods up to three months or in the case of prepaid orders for six months. For periods longer than three months, or six months for pre-paid orders, there is a 5% per month storage charge based on remaining reserve inventory value. This will be billed monthly. Maximum storage time is twelve months.

The procedure is as follows:

1. Customer is to provide an estimate of their requirements. Minimum quantity for lot reservation is 10 liters for liquid media, 500 liters for powder media, 5 liters for sera in 100 ml size and 10 liters for sera in 500 ml size.

2. Upon request, Flow Laboratories will provide at no charge, representative 100 ml bottle per lot of liquid media or sera or 1 x 1 liter package per lot of powder media for testing from up to two production lots, if available. For additional samples, there is a service charge. See our price list for information on the cost.

3. At the time of shipment of these samples, we will reserve a quantity from each lot sufficient to cover the estimated requirement.

4. Reserved lots will be held for four weeks pending a decision, as to which lot or lots are suitable. The reservation period will commence from the date of shipping the test sample. If no decision is forthcoming after four weeks, the stock reservation will be cancelled automatically.

5. On receipt of an affirmative decision, the reservation on the appropriate lot or lots will be confirmed and remaining lots will be released for sale.

6. With the decision to accept a particular lot or lots, the customer will issue a purchase order to take the quantity reserved within three months, from the date the test sample was sent, six months for prepaid orders or within the extended period of time agreed upon by Flow Laboratories. Invoices for shipments made against this reserve will show the unshipped balance.

7. Shipments will be made at prices quoted or in effect at the time the evaluation sample was requested. At the end of the reservation period all unshipped inventory will be automatically removed from customer reserve.

Special Orders — Flow Laboratories is proud of its record of service in providing custom-made products (i.e. cell cultures, media, sera, bacteriological and viral products). Orders and inquiries are invited for special formulations, or material requiring special testing.

After receipt of a firm order for custom-made products, no cancellation is accepted.

Please send as much information as possible (i.e. formula, testing requirements, titer, packaging size, etc.) to your nearest office of Flow Laboratories for a quotation as to the feasibility, price and delivery. See example of Special Media Request Form on pages 5 and 6.

Contact Customer Service for information on minimum quantities, prices, etc.

Mycoplasma Testing — Flow Laboratories has available a laboratory specifically designed for mycoplasma research and testing. We can provide testing on a one time or continuing basis in addition to supplying custom made mycoplasma reagents. For more information, contact your nearest Flow Laboratories office.

Viral Testing — Testing for viruses other than those listed in the sera section can be performed. Contact our customer service department for more details and prices.

Animal Health Research — Our laboratory animal division in addition to supplying animals for research and testing also provides the following services: contract testing for drug evaluation, animal health research, controlled research projects, nutritional, pharmacological and toxicological studies. For more information, contact: Director, Animal Science/Products Division, Flow Laboratories, Inc. 7655 Old Springhouse Road, McLean, Virginia 22101.

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SPECIAL ASSEMBLY REQUEST
MEDIA PRODUCTS

Your Name _____ Date _____

Institution _____

Address _____

City _____ State _____ Zip _____

Telephone ( ) _____ Extension _____

Flow Technical Representative _____

NOTE: To insure receiving what you order, please be as accurate as possible. In case of questions, you will be contacted.

Exact formula and methods must be detailed on reverse side of this page or on separate sheet.

Label Information:

Product Name: _____

with or without L-Glutamine (circle one)

with or without Sodium Bicarbonate (circle one)

Store at _____ C°.

Total Amount Desired _____

Packaged as _____ ml (liquid) container or _____ L (powder)/container

pH of Packaged Product (liquid only) _____ (range)

Testing Required Other Than Sterility (for liquids) or Particle Size and

Moisture (for powders) _____

_____

_____

Requested Delivery Date _____

Purchase Order Number _____

Special Shipping Instructions _____

_____

_____

DETAILED FORMULA*

Include the chemical formulas of all ingredients, complete with waters of hydration, hydrochlorides, sodium salts, etc.

NOTE: In case of shortages of certain forms of chemicals, free base or free acid forms of amino acids will be substituted for hydrochlorides or sodium salts and the waters of hydration will be varied. Should a particular form be essential to a set of conditions, use the words "MUST BE" by the ingredient.

The amounts of dry ingredients should be expressed in milligrams or grams/liter, and liquid items in milliliters. The usage of percentage concentrations is inconvenient.

Ingredient	mg/L	Ingredient	mg/L	Ingredient	mg/L

Helpful Suggestions _____

_____

_____

_____

Literature reference (please include copy): _____

_____

_____

Formula Approved By: _____ Date _____

Investigator's signature

** If this special assembly is a modification of a formula listed in the current Flow Laboratories catalog, all that is required is the catalog number of the product that is to be modified and any changes requested. Care should be taken to list deletions and concentrations of ingredients that are different from that found in the Flow Laboratories formula. Additional items must also be listed.*

Flow Form #349

Raisers™

Cell Raisers™

Cell Cultures

SOURCES

Primary Cultures

With the exception of monkeys, all primary tissues are obtained, whenever possible, from our accredited facility in Dublin, Va. Monkey kidney primary cultures are obtained from African Green, Cynomolgus or Rhesus monkeys held in the specialized holding facilities at Flow Laboratories, Rockville, Maryland.

Serially Propagated Cell Cultures

Whenever possible, these cultures are obtained from the fully authenticated stocks of the American Type Culture Collection. These can be identified by the ATCC reference number in the product listing, for example, RTG-2 (CCL 55). Non-ATCC lines have been obtained whenever possible from the original investigator.

Routinely Produced Cells

Cell cultures are planted to be ready for shipment on Sunday or Monday of each week. However, there occasionally will be one or two day delays. Orders are accepted with this understanding. For primary cultures, orders should be received 10 days before the anticipated shipping date. For heteroploid or diploid cell cultures, orders should be received 7 days before the anticipated shipping date.

Non-Routinely Produced Cells

The minimum order and shipment for one type of non-routinely produced cells is 150 tubes or three #120 cm^2 flasks or five #75 cm^2 flasks or fifteen #25 cm^2 flasks or 100 ml of suspension per shipment. Smaller orders will be accepted with the understanding that shipments will be made when enough orders are received from other customers to make a minimum order. While earlier delivery may be expected, orders for these cells should be received 28 days prior to the anticipated shipping date. Contact our Customer Service Department for prices and availability.

Low and High Split Ratio

Propagation of cell lines are up to 1:6 on a weekly schedule for low split ratios and from 1:7 up on high split ratios.

ANTIBIOTICS

Primary and first passage cultures are normally grown in media containing penicillin (100 I.U./ml) and streptomycin (100 mcg/ml). All heteroploid and diploid cells are grown and supplied in antibiotic-free media.

QUALITY CONTROL

Observations for a cytopathic effect and confluency are routinely carried out on tube and flask cell cultures.

In addition, procedures for all cells include screening for possible bacterial and fungal contamination. All serially propagated cells are routinely screened for Mycoplasma. Should a cell line become contaminated with Mycoplasma, customers are notified, the line discarded and a fresh culture started from our Mycoplasma free frozen stock. Replacement at no charge is made for the new culture.

Samples from each lot of suspension are examined for sterility and for the ability to form confluent cell sheets.

Samples representing each lot of cultures sent to a customer are maintained and routinely examined for three weeks.

Cell cultures should be observed upon receipt. Any questions regarding viability, morphological characteristics, etc., *must be reported* to your nearest office of Flow Laboratories *within 48 hours* after receipt of delivery.

SPECIAL SERVICES

Cell Culture Maintenance Service

This service provides for the maintenance of cell lines belonging to the customer. The weekly charge entitles the customer, at no additional cost, to one shipment per week of 50 million viable cells. (Freight extra). The weekly charge shall cover one cell culture only and may vary depending on the volume and nature of the cells involved. Only cultures free of mycoplasmal, fungal, bacterial or viral contamination are accepted for maintenance. Should a culture die or become contaminated during the maintenance period, no charge will be made for the week during which the cells were lost. Unless supplied by the customer, only Flow media and reagents shall be employed. For further details concerning this service, contact our Customer Service Department.

Cells In Frozen Reserve

Flow Laboratories will prepare cell suspensions to the customer's specifications and reserve the cells in liquid nitrogen for periods of up to one year. The basic charge entitles the customer to a bulk shipment of the material in liquid nitrogen. Additional charges shall be made for partial shipments or for preparing monolayer cultures for the customer from the frozen material at our facility. Flow Laboratories shall not be responsible for loss of viability of the frozen cells in transit.

Special Requests

Requests are considered for cell cultures from most vertebrate. If cells are needed which are not listed, please contact our Customer Service Department for quotation and delivery.

How to Order Cell Cultures

When ordering cell cultures, simply add the appropriate last two-digit packaging code to indicate packaging style and then determine the appropriate price by using the indicated pricing code. See separate price list.

Example:

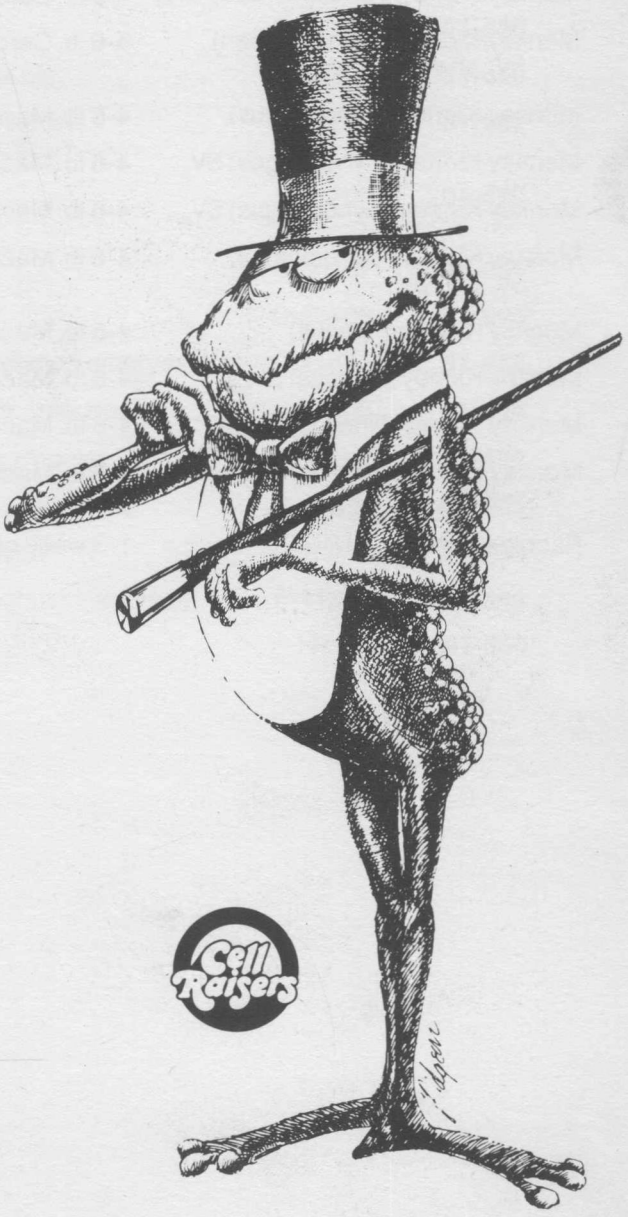
100 tubes of Human Embryonic Kidney would be 100 x 01-000-81

20 - # 25 cm^2 flasks of Human Embroynic Kidney would be 20 x 01-000-82

Packaging

Tubes	***Packaging Code***
Screw cap, 16 x 125 mm round bottom tube	81
Leighton tubes with coverslip	80
Flasks	
#25 - contains approximately 25 cm^2 of cell growth area	82
#75 - contains approximately 75 cm^2 of cell growth area	83
#120 - contains approximately 120 cm^2 of cell growth area	84
Cell Suspensions	41

Cell suspensions are shipped at a concentration of 10^6 viable cells/ml as determined by trypan blue dye exclusion. (Please note that these are *not* cells which normally have been cultured in a spinner culture. Except where otherwise indicated these are suspensions of freshly trypsinized monolayer and primary cell cultures.)



See pages 110-111 for use of cell culture products.

Cell Cultures

Primary Animal and Human Cell Cultures

DESCRIPTION	DERIVATION	OLD CAT. NO.	NEW CAT. NO.
ROUTINELY PRODUCED			
Calf Kidney	1-4 week old calf	0-40505	**01-320**
Bovine Embryonic Kidney	4-16 week gestation embryo	0-40405	**01-300**
Human Amnion		0-50101	**01-003**
Human Embryonic Kidney (derived from fetal or neonatal tissue)		0-50105	**01-000**
Monkey Kidney (African Green)	4-6 lb. Cercopithecus aethiops	0-40305	**01-230**
Monkey Kidney (African Green) SV_5	4-6 lb. Cercopithecus aethiops	0-40306	**01-236**
Monkey Kidney (African Green) SV_{40}	4-6 lb. Cercopithecus aethiops	0-40308	**01-237**
Monkey Kidney (African Green) SV_5 and SV_{40}	4-6 lb. Cercopithecus aethiops	0-40307	**01-238**
Monkey Kidney (Cynomolgus)	4-6 lb. Macaca fascicularis	0-40905	**01-260**
Monkey Kidney (Cynomolgus) SV_5	4-6 lb. Macaca fascicularis	0-40906	**01-266**
Monkey Kidney (Cynomolgus) SV_{40}	4-6 lb. Macaca fascicularis	0-40908	**01-267**
Monkey Kidney (Cynomolgus) SV_5 and SV_{40}	4-6 lb. Macaca fascicularis	0-40907	**01-268**
Monkey Kidney (Rhesus)	4-6 lb. Macaca mulatta	0-40205	**01-200**
Monkey Kidney (Rhesus) SV_5	4-6 lb. Macaca mulatta	0-40206	**01-206**
Monkey Kidney (Rhesus) SV_{40}	4-6 lb. Macaca mulatta	0-40208	**01-207**
Monkey Kidney (Rhesus) SV_5 and SV_{40}	4-6 lb. Macaca mulatta	0-40207	**01-208**
Rabbit Kidney	1-3 week old rabbit	0-40605	**01-530**

See pages 110-111 for use of cell culture products.

Primary Animal and Human Cell Cultures

DESCRIPTION	DERIVATION	OLD CAT. NO.	**NEW CAT. NO.**
NON-ROUTINELY PRODUCED			
Bovine Embryonic Lung	4-16 week gestation embryo	0-40407	**01-301**
Bovine Embryonic Skin & Muscle	4-16 week gestation embryo	0-40409	**01-304**
Canine Kidney	1-6 week old canine	0-41005	**01-350**
Chicken Embryo	7-9 day gestation embryos	0-40703	**01-362**
Chicken Kidney	1-7 day old chicken	0-40705	**01-370**
Feline Kidney	3-6 week old feline	0-40805	**01-410**
Feline Lung	3-6 week old feline	0-40807	**01-411**
Ferret Kidney	1-30 day old ferret	0-41305	**01-430**
Guinea Pig Kidney	1-7 week old guinea pig	0-42305	**01-450**
Hamster Embryo	14 day (approx.) gestation embryo (Syrian Hamster)	0-41203	**01-462**
Hamster Kidney	1-10 day old (Syrian Hamster)	0-41205	**01-470**
Human Embryonic Lung		0-50107	**01-001**
Human Embryonic Skin and Muscle		0-50109	**01-004**
Mouse Embryo (Swiss)	17 day (approx.) gestation embryos	0-41403	**01-482**
Mouse Kidney (Swiss)	7-10 day old (approx.) mouse	0-41405	**01-490**
Mouse Skin (Swiss)	1-7 day old (approx.) mouse	New	**01-494**
Monkey Testicle (African Green)	4-6 lb. Cercopithecus aethiops	0-41504	**01-233**
Monkey Testicle (Rhesus)	4-6 lb. Macaca mulatta	0-40012	**01-203**
Rat Embryo (Sprague Dawley)	17 day (approx.) gestation embryos	0-41503	**01-542**
Rat Kidney (Sprague Dawley)	1-10 day old rat	New	**01-550**

See pages 110-111 for use of cell culture products.

Serially Propagated Cell Cultures

DESCRIPTION	ATCC NO.	DERIVATION	SPLIT RATIO	OLD CAT. NO.	NEW CAT. NO.
ROUTINELY PRODUCED					
BHK-21 (C-13)	CCL 10	Baby Hamster Kidney (MacPherson & Stoker)	High	0-26200	**03-420**
BS-C-1	CCL 26	Monkey Kidney (African Green) (Hopps et al)	Low	0-24600	**02-250**
Flow 1000		Human Embryonic Skin and Muscle (Flow Laboratories)	Low	0-13100	**02-014**
Flow 2000		Human Embryonic Lung (Flow Laboratories)	Low	0-13200	**02-011**
Flow 4000		Human Embryonic Kidney (Flow Laboratories)	Low	0-13400	**02-010**
Flow 5000		Whole Human Embryo (Flow Laboratories)	Low	0-13500	**02-012**
Flow 7000		Human Embryonic Foreskin (Flow Laboratories)	Low	0-13700	**02-019**
HeLa (Fetal Bovine Serum Adapted)	(From CCL2)	Human Carcinoma of Cervix (Flow Laboratories)	High	0-26340	**03-117**
HEp-2*	CCL 23	Human Carcinoma of Larynx (Moore et al)	High	0-26410	**03-108**
IMR 90 (DIPLOID)		Human Embryonic Lung (Nichols et al)	Low	New	**02-041**
KB*	CCL 17	Human Carcinoma of Nasopharynx (Eagle)	High	0-26500	**03-128**
LLC-MK_2 (Original)	CCL 7	Monkey Kidney (Rhesus) (Hull et al)	High	0-24700	**03-200**
LLC-RK_1	CCL 106	Rabbit Kidney (Hull et al)	High	0-25400	**03-560**
MDCK (NBL-2)	CCL 34	Canine Kidney (Madin & Darby)	High	0-26700	**03-360**
MRC-5 (DIPLOID)		Human Embryonic Lung	Low	New	**02-021**
NCTC clone 929 ("L-929")	CCL 1	Mouse Connective Tissue (Sanford et al) Clone of Strain L	High	0-26600	**03-439**
Vero	CCL 81	Monkey Kidney (African Green) (Yasummura & Kawakita)	High	0-24800	**03-230**
WI-38 (DIPLOID)		Human Embryonic Lung (Hayflick & Moorhead)	Low	0-12400	**02-001**

*NOTE: Cell lines marked with an asterisk are cell lines identified by ATCC and collaborating laboratories as probably contaminated with HeLa. Some of these cell lines, started from Caucasian origin tissues, possess Type A glucose-6-phosphate dehydrogenase (G6PD never found in Caucasians), chromosome markers of HeLa and they lack the Y chromosome. It is advisable not to use these cell lines in research where the validity of results depends on species origin.

For further information please refer to the American Type Culture Collection Catalog of Animal Cell Lines (First Edition 1975).

See pages 110-111 for use of cell culture products.

Serially Propagated Cell Cultures

DESCRIPTION	ATCC NO.	DERIVATION	SPLIT RATIO	OLD CAT. NO.	NEW CAT. NO.
NON-ROUTINELY PRODUCED					
3T3-B		Balb/C Mouse Fibroblasts (Todaro)	High	0-25920	**03-415**
3T3-B SV_{40} transformed		Balb/C Mouse Fibroblasts (Todaro)	High	0-20200	**03-417**
3T3-Swiss Albino	CCL 92	Mouse Contact-Inhibited Fibroblasts (Todaro & Green)	High	0-25910	**03-405**
3T3 SV_{40} transformed		Swiss Mouse Fibroblasts (Todaro)	High	0-20100	**03-407**
3T6-Swiss Albino	CCL 96	Mouse Collagen-Secreting Fibroblasts (Todaro & Green)	High	0-25950	**03-406**
AV_3*	CCL 21	Human Amnion (Robbins & Lepow)	High	0-26800	**03-003**
Buffalo African Green		Monkey Kidney (African Green) (Baron)	High	0-40210	**03-240**
CCRF S-180 II	CCL 8	Mouse, Sarcoma 180 (Foley et al)	High	0-27700	**03-428**
Chang Conjunctiva* Clone 1-5c-4	CCL 20.2	Human Conjunctiva (Wong & Kilbourne)	High	0-28300	**03-171**
Chang Liver*	CCL 13	Human Adult Liver (Chang)	High	0-27500	**03-130**
Chimp Liver		Chimpanzee Liver (Douglas et al)	High	0-25000	**03-284**
CHO-K1	CCL 61	Chinese Hamster Ovary Subclone of CHO (Puck)	High	New	**03-402**
CV-1	CCL 70	Monkey Kidney (African Green) (Jensen)	Low	0-27100	**02-240**
DBS-FCL-1		African Green Monkey Fetal Lung (Wallace)	Low	0-12700	**02-231**
DBS-FRhL-2		Rhesus Monkey Fetal Lung (Wallace)	Low	0-12600	**02-201**
Detroit 532	CCL 54	Human Skin, Down's syndrome (Stulberg & Simpson)	Low	0-28500	**02-136**
Don	CCL 16	Chinese Hamster Lung (HSV)	Low	0-28400	**02-411**

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For further information please refer to the American Type Culture Collection Catalog of Animal Cell Lines (First Edition 1975).

See pages 110-111 for use of cell culture products.

Serially Propagated Cell Cultures

DESCRIPTION	ATCC NO.	DERIVATION	SPLIT RATIO	OLD CAT. NO.	NEW CAT. NO.
NON-ROUTINELY PRODUCED					
EB-3 (Suspension)†	CCL 85	Burkitt's Lymphoma (Epstein)	High	0-38130	**03-149**
EBTr (NBL-4)	CCL 44	Bovine Embryonic Trachea (Kniazeff et al)	Low	0-25100	**02-325**
E. Derm (NBL-6)	CCL 57	Equine Dermis (Kniazeff et al)	Low	0-28600	**02-356**
FHM	CCL 42	Fat Head Minnow (Gravell/Maisberger)	Low	0-28900	**02-701**
FL*	CCL 62	Human Amnion (Fogh & Lund)	High	0-27200	**03-013**
Flow 3000		Human Embryonic Brain (Flow Laboratories)	Low	0-13300	**02-102**
Flow 6000		Human Embryonic Tonsil (Flow Laboratories)	Low	0-13600	**02-016**
Flow 8000		Human Embryonic Spleen (Flow Laboratories)	Low	0-13800	**02-103**
Flow 9000		Human Embryonic Pituitary (Flow Laboratories)	Low	0-13900	**02-104**
Flow 10000		Human Embryonic Thyroid (Flow Laboratories)	Low	0-14000	**02-017**
Flow 11000		Human Embryonic Intestine (Flow Laboratories)	Low	0-14200	**02-018**
Girardi Heart*	CCL 27	Human Heart (Girardi)	High	0-20020	**03-085**
Hak	CCL 15	Syrian Hamster Kidney (Spence)	High	0-25200	**03-410**
HeLa Ohio		Clone of HeLa Rhinovirus Sensitive (Hamparian)	High	0-26320	**03-147**
HeLa S-3		Clone of HeLa (Puck et al)	High	0-26330	**03-157**
Intestine 407*	CCL 6	Human Embryonic Intestine (Henle & Deinhardt)	High	0-27300	**03-008**
J-111*	CCL 24	Human Monocytic Leukemia (Osgood & Brooke)	High	0-25300	**03-109**
Jijoye (P-2003) (Suspension)†	CCL 87	Burkitt's Lymphoma (Pulvertaft)	High	0-38500	**03-159**

†Suspension: only available as a suspension

*NOTE: Cell lines marked with an asterisk are cell lines identified by ATCC and collaborating laboratories as probably contaminated with HeLa. Some of these cell lines, started from Caucasian origin tissues, possess Type A glucose-6-phosphate dehydrogenase (G6PD never found in Caucasians), chromosome markers of HeLa and they lack the Y chromosome. It is advisable not to use these cell lines in research where the validity of results depends on species origin.

For further information please refer to the American Type Culture Collection Catalog of Animal Cell Lines (First Edition 1975).

See pages 110-111 for use of cell culture products.

Serially Propagated Cell Cultures

DESCRIPTION	ATCC NO.	DERIVATION	SPLIT RATIO	OLD CAT. NO.	**NEW CAT. NO.**
L-132*	CCL 5	Human Embryonic Lung (Davis)	High	0-27400	**03-001**
Monkey Heart		Cynomolgus Heart (Salk & Ward)	High	0-27600	**03-262**
Oa 1 B (NBL-13)		Sheep Brain (Knaizeff et al)	Low	New	**02-504**
PK (15)	CCL 33	Porcine Kidney (Stice)	High	0-25600	**03-500**
Raji (Suspension)†	CCL 86	Burkitt's Lymphoma (Pulvertaft)	High	0-38400	**03-169**
RK-13		Rabbit Kidney (Beale et al) (McCarthy et al)	High	0-24900	**03-550**
RTG-2	CCL 55	Rainbow Trout Gonad (Wolf & Quimby)	Low	0-29800	**02-734**
SIRC	CCL 60	Rabbit Cornea (Volkert)	Low	0-25800	**02-552**
WISH*	CCL 25	Human Amnion (Hayflick)	High	0-27800	**03-023**

†Suspension: only available as a suspension

*NOTE: Cell lines marked with an asterisk are cell lines identified by ATCC and collaborating laboratories as probably contaminated with HeLa. Some of these cell lines, started from Caucasian origin tissues, possess Type A glucose-6-phosphate dehydrogenase (G6PD never found in Caucasians), chromosome markers of HeLa and they lack the Y chromosome. It is advisable not to use these cell lines in research where the validity of results depends on species origin.

For further information please refer to the American Type Culture Collection Catalog of Animal Cell Lines (First Edition 1975).

See pages 110-111 for use of cell culture products.

Serially Propagated Cell Cultures from Virus Induced Hamster Tumors

DESCRIPTION	SPLIT RATIO	OLD CAT. NO.	NEW CAT. NO.
NON-ROUTINELY PRODUCED			
Adeno 7 Hamster Tumor	High	0-68300	**03-600**
Polyoma Hamster Tumor	High	0-68400	**03-601**
Rous Sarcoma (Schmidt-Ruppin) Hamster Tumor	High	0-68500	**03-603**
Spontaneous Hamster Tumor Control (non-viral induced)	High	0-68600	**03-604**
SV_{40} Hamster Tumor	High	0-68200	**03-605**

See pages 110-111 for use of cell culture products.