

Research Models

Our Animal Models

Charles River is committed to providing you with high-quality genetically standardized models such as VAF/Plus® and VAF/Elite® animals, which are free of select infectious agents and parasites. We understand that selecting the appropriate animal model for your studies is critical to your research success. To assist you, we offer an evaluation program that allows you to assess the quality and compatibility of our animal models before making a purchase. For more information, please go to www.criver.com/rmeval.

VAF* Health Profiles

The table below lists the infectious agents specifically excluded from our VAF/Plus®, VAF/Elite®, and immunodeficient VAF/Elite® animal colonies. For further information regarding viral profiles, microbiological flora, or the comprehensive list of agents included in the Charles River health surveillance program, visit the Health Reports section of our website (www.criver.com/info/rm), call us at 1.877.274.8371, or email us at askcharlesriver@crl.com.

Health Profile	Species	Agents Excluded†
VAF/Plus®	Mouse	SEND, PVM, MHV, MVM, MPV, TMEV (GDVII), REO, EDIM, MAV, POLY, K, MCMV, MTLV, LCMV, HANT, ECTRO, ECUN, CARB, LDV, MNV
		<i>M. pulmonis</i> , <i>Salmonella</i> spp., <i>S. moniliformis</i> , <i>C. kutscheri</i> , <i>H. hepaticus</i> , <i>C. rodentium</i>
	Rat	SEND, PVM, SDAV, KRV, H-1, RPV, RMV, REO, RTV, LCMV, HANT, MAV, ECUN, CARB
		<i>M. pulmonis</i> , <i>Salmonella</i> spp., <i>S. moniliformis</i> , <i>C. kutscheri</i> , <i>H. hepaticus</i>
	Guinea pig	SEND, PVM, LCMV, REO, GAV
		<i>M. pulmonis</i> , <i>Salmonella</i> spp., <i>S. moniliformis</i> , <i>S. zooepidemicus</i> , <i>B. bronchiseptica</i> , <i>H. hepaticus</i>
	Hamster	SEND, PVM, LCMV, REO, ECUN
		<i>Salmonella</i> spp., <i>H. hepaticus</i>
Rabbit	ECUN, RHDV	
	<i>P. multocida</i> , <i>Salmonella</i> spp., <i>Treponema</i> , Tyzzer's disease	
VAF/Elite®	Mouse (immunocompetent)	These mice are free of all of the agents listed above in the VAF/Plus® mouse profile, plus Beta hemolytic <i>Streptococcus</i> spp., <i>K. oxytoca</i> , <i>K. pneumoniae</i> , <i>P. pneumotropica</i> , <i>P. aeruginosa</i> , <i>P. mirabilis</i> , <i>S. aureus</i> .
	Mouse (immunodeficient)	These mice are free of all of the agents listed above in the VAF/Plus® mouse profile, plus Beta hemolytic <i>Streptococcus</i> spp., <i>K. oxytoca</i> , <i>K. pneumoniae</i> , <i>P. pneumotropica</i> , <i>Pneumocystis</i> spp., <i>P. aeruginosa</i> , <i>P. mirabilis</i> , <i>S. aureus</i> , <i>C. bovis</i> .
	Rat (immunodeficient)	These rats are free of all of the agents listed above in the VAF/Plus® rat profile, plus <i>S. aureus</i> , <i>S. pneumoniae</i> , Beta hemolytic <i>Streptococcus</i> spp., <i>Klebsiella</i> spp., <i>K. oxytoca</i> , <i>K. pneumoniae</i> , <i>P. pneumotropica</i> , <i>Pneumocystis</i> spp., <i>P. aeruginosa</i> , <i>P. mirabilis</i> , <i>C. bovis</i> .

* Virus Antibody Free (VAF)

† All helminths, ectoparasites, and pathogenic GI protozoa are excluded as part of our VAF/Plus® and VAF/Elite® profiles. See Glossary of Terms for abbreviation key for agents.

The VAF/Elite® health profile is currently offered for the following stocks and strains of mice: 129-Elite, BALB/c-Elite, C57BL/6-Elite, CD1-Elite, SJL-Elite, and SKH1-Elite.

Birth Dates

Birth dates are furnished on shipping documents for orders placed by age and are calculated according to the ship date of the order. The date of birth is based upon the midpoint of the specified age range. Exact date of birth is provided when exact-age animals are ordered.

Age/Weight Correlation Information

Age/weight correlation information is presented throughout this product catalog for each sex of most stocks and strains. The information is specific to the conditions maintained in Charles River barrier production rooms. The shaded areas on each chart are the mean weight, plus or minus two standard deviations, at a given age, averaged across all production facilities. This represents the majority of the population. Overlaps in the full range of weights occur between age groups, and will be more pronounced in outbred animals.

Ordering Information

To accommodate your need for prompt shipment, sales are made on the basis of telephone orders without written documentation. Fax or email confirmation of orders are available upon request. Our acceptance of your order is expressly made conditional on your consent to our General Terms and Conditions of Sale, and our prices have been set accordingly.

Any provision of a purchase order or confirmation that is additional to, or conflicts with, our General Terms and Conditions of Sale is expressly rejected and shall not be binding on us. Please consider this before placing your order.

Some animal models are produced only in small quantities. Upon your request, we will work to scale up our colony production to meet your needs.

The prices in this catalog are for customers located in the United States who are purchasing research models and services sourced from the United States. All other customers should contact Client Relations for pricing in your region.

For additional information, please contact the Client Relations Department at 1.800.LAB.RATS (1.800.522.7287) or by fax at 1.800.992.7329.

Cancellation Policies

Standard or Regular Animal Orders To avoid charges, cancellation of standard animal orders must be received at least one business day prior to the scheduled shipment date.

Rabbit Orders Cancellations of rabbit orders shipping at 3.1 kg or higher are subject to a cancellation fee.

Timed Pregnant Animals To avoid charges, cancellations for pregnant animals must be received prior to the scheduled mating day.

Value-Added Services To avoid charges, cancellations for value-added services, including, but not limited to, tattooing or ear tagging, must be received at least three business days prior to the ship date.

Surgical and Biospecimen Services Cancellations must be received at least five business days (ten for guinea pigs) prior to the scheduled ship date for most orders. Notice of cancellation is extended prior to the scheduled ship date for procedures with prolonged holding times, including, but not limited to, 5/6 nephrectomy, Parkinson's, and telemetry procedures. Animals requested to be held longer than seven days postoperatively will incur a holding fee.

Shipments Outside North America Cancellations need to be received by 5:00 p.m. Eastern Time (ET) on the Friday prior to shipping. If canceled by then, the only cost incurred is for the USDA Health Certificate. If cancellation notice is received after the animals are packed and/or sent to the airport, the customer is responsible for animal and freight charges for transportation to/from the airport.

Miscellaneous Charges

Surcharges (where applicable)

1 gram weight range for inbred mice	Add 5%
5 gram weight range for non-obese rats & hamsters	Add 25%
10 gram weight range for non-obese rats	Add 15%
Retired breeders with specified weight or approximate age	Add 50%

Applicable Container and Other Charges

Filtered shipping container (Sew Easy™)	21.70 each
Gnoto-safe® shipping container	40.40 each
Weight list	0.70 per animal

Import/Export Preparation Charges

Preparation of appropriate documentation for international shipment of Charles River products	600.00 per shipment*
Importation or exportation of non-Charles River products	900.00 per shipment*

* Plus fixed costs

Pregnant Animal Guarantee Policy

Charles River produces pregnant animals to your order specification. Most barrier-reared rats and mice can be safely and accurately palpated for pregnancy after 13 days of gestation. Prior to that, pregnancy is determined by observation of a vaginal plug. Following timed exposure to the male, the date the copulatory plug is found (plug date) is considered to be day one of gestation unless noted otherwise. For additional information and/or strain availability, contact the Client Relations Department at 1.800.LAB.RATS (1.800.522.7287).

Stock or Strain	PERCENT GUARANTEED PREGNANT		
	Timed Pregnant Up to 12 Days Gestation	Timed Pregnant 13 Days Gestation and Over	Untimed Pregnant 13-17 Days Gestation Only
Outbred rats	Plug guarantee only	100%	95%
Outbred mice	Plug guarantee only	100%	100%
Inbred rats and mice	Plug guarantee only	75%	75%
NZW rabbits	50%	100%	N/A

Note: We do not guarantee the number of offspring per litter. Due to natural variations in the length of gestation, the exact day of parturition is not guaranteed. To avoid charges, cancellations for pregnant animals must be received prior to the scheduled mating day.

Filtered (Sew Easy™) Shipping Container Densities

It is our responsibility to maintain the strictest health and welfare standards when shipping our animals, not only because it's the right thing to do, but because our animals are vital to your research. To help make the comfort and care of our animals a priority, we provide several crates that are tailored to established shipping density guidelines for a variety of species. Our shipping

crates have viewing windows that allow you to inspect the animals and assess their interior conditions during and after shipping. The interior of our filtered crates is UV-light irradiated prior to packing animals, and our individual Gnoto-safe® plastic containers are disinfected with a cold sterilant prior to packing the animals.

Rats

Gram Range Non-Obese	Days Range Non-Obese	Days Range Obese	Animals per Container*
Up to 50	Up to 21	Up to 21	20
51-75	22-26	22-24	17
76-100	27-30	25-26	13
101-125	31-35	27-28	10
126-150	36-42	29-36	9
151-200	43-50	37-42	8
201-250	51-60	43-48	6
251-300	61-70	49-56	5
301-400	71-94	57-63	4
401-450	95-plus	64-70	3
451-plus		71-plus	2

* Number of animals per container may be reduced as needed based on model requirements.

Mice

Gram Range Non-Obese	Days Range Non-Obese	Days Range Obese	Animals per Container
Up to 35	Up to 56	Up to 56	40
36-plus	57-plus	57-70	33
		71-plus	20

Rabbits

Kilogram Range	Animals per Container
Up to 2.5	2
2.6-plus	1

Special Services

	Rats per Container	Mice per Container	Guinea Pigs per Container	Hamsters per Container
Retired breeders	3	33	2	3
Proven breeders	3	33	2	3
Timed pregnant	7	17	3	3
Untimed pregnant	7	17	3	3
Littermates	7 (1 litter)	7 (1 litter)	3 (1 litter)	10 (1 litter)
Mothers with pups	2	3	2	2
Lactating females	7	33	3	15

Guinea Pigs

Gram Range	Days Range	Animals per Container
Up to 350	Up to 33	10
351-600	34-65	6
601-800	66-81	5
801-plus	82-plus	4

Gerbils

Gram Range	Days Range	Animals per Container
Up to 35	Up to 35	35
36-50	36-56	25
51-70	57-84	20
71-plus	85-plus	15

Hamsters

Gram Range	Days Range	Animals per Container
Up to 50	Up to 21	25
51-70	22-42	20
71-plus	43-plus	15

100% Recyclable Gnoto-safe® Shipping Container

	Mice	Rats
Animals per container*	30	2

* Two cages per container

RESOURCES

GLOSSARY OF TERMS

1.877.criver1 | www.criver.com | askcharlesriver@crl.com

Agent	Abbreviation	Family/Order	Subfam/Genus	Host Species*
Adenovirus	MAV, RAD	Adenoviridae	Mastadenovirus	M, R
Aleutian disease virus	ADV	Parvoviridae	Amdovirus	F
Cilia-associated respiratory bacillus	CARB	Unclassified	Unclassified	M, R, Rb
Clostridium piliforme	CPIL	Clostridaceae	Clostridium	M, R, Rb, F
Distemper virus	CDV	Paramyxoviridae	Morbilivirus	F
Ectromelia virus (Mousepox)	ECTRO	Poxviridae	Orthopoxvirus	M
Eimeria	EIM	Eimeriidae	Eimeria	M, Rb
Encephalitozoon cuniculi	ECUN	Pleistophoridae	Encephalitozoon	M, R, GP, H, Rb
Encephalomyocarditis virus	EMCV	Picornaviridae	Cardiovirus	M, R
Guinea pig adenovirus	GAV	Adenoviridae	Mastadenovirus	GP
Guinea pig cytomegalovirus	GpCMV	Herpesviridae	Betaherpesvirus	GP
Hantaan	HTNV (HANT)	Bunyaviridae	Hantavirus	M, R
Infectious pancreatic necrosis virus	IPNV	Birnaviridae	Aquabirnavirus	Z
Infectious spleen and kidney necrosis virus	ISKNV	Iridoviridae	Megalocytivirus	Z
Influenza A virus	INFA	Orthomyxoviridae	Influenzavirus A	F
Kilham rat virus	KRV	Parvoviridae	Protoparvovirus	R
Lactate dehydrogenase-elevating virus	LDV/LDH	Arteriviridae	Arterivirus	M
Ljungan virus	LV	Picornaviridae	Parechovirus	R
Lymphocytic choriomeningitis virus	LCMV	Arenaviridae	Arenavirus	M, R, GP, H
Minute virus of mice	MVM	Parvoviridae	Protoparvovirus	M
Mouse chapparravirus	MuCPV	Parvoviridae	Chapparravirus	M
Mouse cytomegalovirus	MCMV	Herpesviridae	Betaherpesvirus	M
Mouse hepatitis virus	MHV	Coronaviridae	Betacoronavirus	M
Mouse parvovirus	MPV-1/-2/-5	Parvoviridae	Protoparvovirus	M
Mouse pneumonitis virus	K	Polyomaviridae	Polyomavirus	M
Mouse thymic virus	MTLV	Herpesviridae	Roseolovirus	M
Murine norovirus	MNV	Caliciviridae	Norovirus	M
Murine rotavirus	EDIM/ROTA-A	Reoviridae	Rotavirus	M
Mycoplasma arthritis	MARTH	Mycoplasmataceae	Mycoplasma	M, R
Mycoplasma pulmonis	MPUL	Mycoplasmataceae	Mycoplasma	M, R
Myxomatosis virus	MYXO	Poxviridae	Leporipoxvirus	Rb
Parainfluenza virus (type 1)	PIV-1	Paramyxoviridae	Respirovirus	Rb
Parainfluenza virus (type 2)	PIV-2	Paramyxoviridae	Rubulavirus	Rb
Parainfluenza virus (type 3)	PIV-3	Paramyxoviridae	Respirovirus	GP
Parainfluenza virus (type 5)	PIV-5	Paramyxoviridae	Rubulavirus	GP, H
Pneumocystis carinii	PCAR	Pneumocystidaceae	Pneumocystis	R
Pneumonia virus of mice	PVM	Paramyxoviridae	Pneumovirus	M, R, GP, H
Polyoma virus	POLY	Polyomaviridae	Polyomavirus	M
Prospect Hill virus	PHV	Bunyaviridae	Hantavirus	M
Rabbit adenovirus	RbAV	Adenoviridae	Mastadenovirus	Rb
Rabbit hemorrhagic disease virus	RHDV	Caliciviridae	Lagovirus	Rb
Rabbit picobirnavirus	RPBV	Picobirnaviridae	Picobirnavirus	Rb
Rabbit rotavirus	ROTA	Reoviridae	Rotavirus	Rb
Rat coronavirus/sialodacryoadentitis virus	RCV, SDAV	Coronaviridae	Betacoronavirus	R
Rat cytomegalovirus	RCMV	Herpesviridae	Betaherpesvirus	R
Rat minute virus	RMV	Parvoviridae	Protoparvovirus	R
Rat parvovirus	RPV	Parvoviridae	Protoparvovirus	R
Rat polyomavirus	RatPyV2/RPyV2	Polyomaviridae	Unclassified	R
Rat rotavirus (infectious diarrhea of infant rats)	IDIR/ROTA-B	Reoviridae	Rotavirus	R
Rat theilovirus (Theiler's-like virus of rats)	RTV	Picornaviridae	Theilovirus	R
Reovirus	REO	Reoviridae	Orthoreovirus	M, R, GP, H
Rodent Protoparvovirus NS-1	NS-1	Parvoviridae	Protoparvovirus	M, R
Sendai virus	SEND	Paramyxoviridae	Respirovirus	M, R, GP, H
Seoul virus	SEO	Bunyaviridae	Hantavirus	M, R
Theiler's murine encephalomyelitis virus	TMEV (GDVII)	Picornaviridae	Cardiovirus	M, R
Toolan's H-1 virus	H-1	Parvoviridae	Protoparvovirus	R
Toxoplasma gondii	TOXO	Sarcocystidae	Toxoplasma	Rb
Treponema paraluis-cuniculi	TREP	Spirochaetales	Treponema	Rb

* Species: M = mouse, R = rat, GP = guinea pig, H = hamster, Rb = rabbit, F = ferret, Z = zebrafish

RESOURCES

GLOSSARY OF TERMS

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Agent	Abbreviation	Family/Order	Subfam/Genus	Host Species
Epstein-Barr virus	EBV	Herpesviridae	Lymphocryptovirus	Simian
Hepatitis A	HEP-A	Picornaviridae	Hepatovirus	Simian
Herpes B virus	HBV	Herpesviridae	Alphaherpesvirus	Simian
Herpes virus papio-2	HVP-2	Herpesviridae	Alphaherpesvirus	Simian
Lymphocryptovirus	LCV	Herpesviridae	Lymphocryptovirus	Simian
Macaque (Rhesus) rhadinovirus	MRV	Herpesviridae	Rhadinovirus	Simian
Malaria (Plasmodium)	MAL	Plasmodiidae	Plasmodium	Simian
Measles virus	MV	Paramyxoviridae	Morbillivirus	Simian
Parainfluenza virus (type 5)	PIV-5 (SV-5)	Paramyxoviridae	Rubulavirus	Simian
Simian agent 8	SA-8	Herpesviridae	Simplexvirus	Simian
Simian cytomegalovirus	SCMV/CMV	Herpesviridae	Cytomegalovirus	Simian
Simian foamy virus	SFV	Retroviridae	Spumavirus	Simian
Simian immunodeficiency virus	SIV	Retroviridae	Lentivirus	Simian
Simian rotavirus	SA-11	Reoviridae	Rotavirus	Simian
Simian T-lymphotropic virus	STLV	Retroviridae	Deltaretrovirus	Simian
Simian type D retrovirus	SRV	Retroviridae	Betaretrovirus	Simian
Simian varicella virus	SVV	Herpesviridae	Varicellovirus	Simian
Simian virus 40	SV-40	Polyomaviridae	Polyomavirus	Simian
Trypanosoma cruzi (Chagas Disease)	T. cruzi/CHA	Trypanosomatidae	Trypanosoma	Simian