

Wistar Rats

NOMENCLATURE: Cri:WI



Strain Origin

To Scientific Products Farm, Ltd. [predecessor of Charles River United Kingdom] in 1947 from Wistar Institute.
To Charles River in 1975 from Charles River UK. This particular colony was selected because of a low incidence of hydronephrosis.

Coat Color: White (albino)

Produced: North America, Europe and Japan

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Genetic Management of the Wistar Rat Colony

Charles River uses our International Genetic Standard (IGS) program to manage production of the Wistar Han rat. The IGS program is a management system that minimizes inbreeding and manages random genetic drift that would otherwise lead to colony divergence among colonies bred in different locations worldwide. The IGS program is validated by direct genetic analysis of animals from the foundation colony and the barrier rooms.

Charles River Wistar Data

We understand that knowing certain baseline parameters for your research model colonies is vital to achieving valid and reproducible research results. To help ensure that we are providing the exact research models that you need, we conduct routine health surveillance on our animal colonies for an extensive list of infectious agents, in addition to maintaining clinical and toxicological data for those models.

Clinical Chemistry

Cri:WI*		CHOL (mg/dl)	TRG (mg/dl)	ALT (U/l)	AST (U)	ALK (u/l)	TBIL (mg/dl)
Male	Mean	108.02	230.98	58.41	142.54	239.66	0.31
	S.D.	27.11	165.67	24.80	124.36	69.64	0.11
	n	122	122	121	121	121	121
Female	Mean	101.68	151.93	57.00	214.69	150.91	0.54
	S.D.	24.50	85.17	25.98	219.29	49.93	2.93
	n	121	121	121	121	121	121

Cri:WI*		GLU (mg/dl)	P (mg/dl)	TP (g/dl)	Ca (mg/dl)	BUN (mg/dl)	CRE (mg/dl)
Male	Mean	274.36	13.58	7.45	12.67	20.60	0.53
	S.D.	85.16	2.15	0.77	1.06	5.67	0.10
	n	120	122	122	121	121	121
Female	Mean	269.93	12.45	7.30	12.51	19.16	0.53
	S.D.	87.10	1.82	0.68	0.99	6.91	0.24
	n	121	121	121	121	122	121

Cri:WI*		ALB (g/dl)	Na (meq/l)	K ⁺ (meq/l)	Cl (meq/l)
Male	Mean	3.87	152.88	10.26	109.09
	S.D.	0.36	8.74	1.41	8.71
	n	121	122	122	122
Female	Mean	3.90	150.05	9.42	107.83
	S.D.	0.38	14.48	1.68	8.62
	n	121	120	119	120

*North American colonies only/non-fasted values

*Potassium levels reflect acidosis caused by CO₂ euthanasia

Age: 56 - 70 days

Diet: Purina CRL (5L79) rodent chow

Temperature: 68 - 72°F

Humidity: 40 - 60%

Cage Density: 18.6 in²/rat

Euthanasia: CO₂

Bleed Route: Cardiac puncture after euthanasia

Analyzing Equipment: Alfa Wassermann Ace Alera

Screening Period: January to December 2008

Hematology

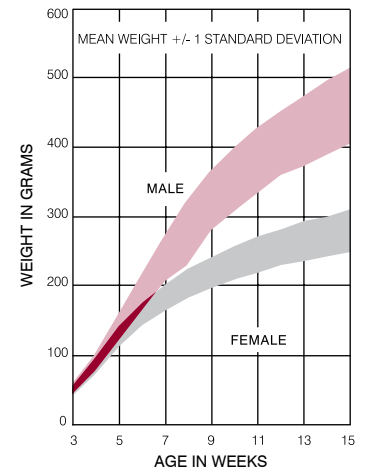
Crl:WI*		WBC (K/ μ l)	NEUT (K/ μ l)	LYMPH (K/ μ l)	MONO (K/ μ l)	EOS (K/ μ l)
Male	Mean	9.45	3.88	4.79	0.65	0.11
	S.D.	3.01	1.44	1.72	0.31	0.12
	n	122	122	122	122	122
Female	Mean	8.35	2.91	4.67	0.57	0.16
	S.D.	2.82	1.08	1.66	0.31	0.20
	n	119	119	119	119	119

Crl:WI*		BASO (K/ μ l)	NEUT (%)	LYMPH (%)	MONO (%)	EOS (%)
Male	Mean	0.02	40.80	51.05	6.86	1.09
	S.D.	0.03	8.12	8.03	2.30	1.14
	n	122	122	122	122	122
Female	Mean	0.04	35.09	56.12	6.70	1.71
	S.D.	0.07	7.15	7.25	2.20	1.65
	n	119	119	119	119	119

Crl:WI*		BASO (%)	RBC (M/ μ l)	HGB (g/dl)	HCT (%)	MCV (fl)
Male	Mean	0.23	7.72	17.19	50.58	65.60
	S.D.	0.30	1.19	2.76	7.92	4.64
	n	122	122	122	122	122
Female	Mean	0.38	7.58	16.51	49.02	64.76
	S.D.	0.58	0.99	2.01	6.69	3.93
	n	119	119	119	119	119

Crl:WI*		MCH (pg)	MCHC (g/dl)	RDW (%)	PLT (K/ μ l)	MPV (fL)
Male	Mean	22.30	34.06	15.84	1815.40	7.52
	S.D.	1.55	2.16	0.95	489.72	0.56
	n	122	122	122	122	122
Female	Mean	21.86	33.82	15.13	1710.82	7.39
	S.D.	1.41	2.37	2.36	536.98	0.63
	n	119	119	119	119	119

*North American colonies only/non-fasted values



Age: 56 - 70 days

Diet: Purina CRL (5L79) rodent chow

Temperature: 68 - 72°F

Humidity: 40 - 60%

Cage Density: 18.6 in²/rat

Euthanasia: CO₂

Bleed Route: Cardiac puncture after euthanasia

Analyzing Equipment: Drew Scientific HemaVet

Screening Period: January to December 2008

Research Applications and References

The Wistar rat is a multipurpose model that can be used in such fields as toxicology (safety and efficacy testing), aging and oncology.

General Purpose

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Toxicology

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Carcinogenesis

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