Model repositories

Name	Acronym	Website	Country
Rat Resource Center	RRC	http://www.rrrc.us/search/?strainStatus=available	USA
National BioResource Project	NBRP	http://www.anim.med.kyoto-u.ac.jp/NBR/strainsx/Strains_list.aspx	Japan

Reporter rat models

LE, Long Evans; SD, Sprague-Dawley; DA, Dark Agouti; LEW, Lewis; F344, Fischer

L, alive animals; CP, cryopreserved (sperm and/or embryo)

System/Tissue	Promotor / Reporter gene	Model name: strain-mutation type(promoter-reporter gene)	Phenotype Specificity	Reference / Donor (Lab)	Depository ID#	L/CP
Neuronal	cFos (sp)/GFP	LE-Tg (cFos-eGFP)2Ottc	Expression in cells expressing immediate early gene Fos (prefrontal cortex, dorsal striatum, hippocampus)	B.Harvey-J. Pickel (NIDA/NIMH)	RRRC #00766	CP
	S-100b (sp)/GFP	Wistar- Tg(S-100b-GFP)	High expression-Specifically in pituitary folliculo-stellate cells, brain astrocytes, adipocytes, chondrocytes	[1–3]	NBRP Rat N#0371	L/CP
	Gnrh1 (sp)/GFP	Wistar-Tg(Gnrh1-EGFP)	EGFP fluorescence is observed only in Gnrh1-immunoreactive neurons, approximately one third of which has strong EGFP fluorescence.	[4–11]	NBRP Rat #0469	L/CP
	Nestin enhancer / Hspa1b promoter / GFP	SD-Tg(Nes-Hspa1b-EGFP)		[12]	NBRP Rat #0352	CP
	Tub□1a / GFP	SD-Tg(Tuba1a-EYFP)		[13]	NBRP Rat #0353	CP
Salivary gland Lung	Aqp5 (sp) / GFP	SD-Tg(Aqp5-GFP)	Expression in salivary gland (acini cells) in alveolar epithelial type I (AT1) cells in the lung.	[14]	RRRC #00427	CP
	Plcb2 (sp)/GFP	Wistar-Tg(Plcb2-WGA,-EGFP)	GFP are expressed in almost all PLCb2-positive cells in the taste buds.	Keiko Abe	NBRP Rat #0214	CP
Germ cells	Pou5f1 (sp) / GFP	SD-Tg(Pou5f1-EGFP)	Expression in germ cells	C. Dann (U. Texas Southwestern Medical Center at Dallas)	RRRC #00319	CP
	Pou5f1 (sp)/ DsRed	SD-Tg(Pou5f1-Dsred)	DsRed expression in inner cell mass of blastocyst stage.	C. Dann	RRRC #00320	CP

Endocrine	RIP7 (sp)/GFP	SD-Tg(RIP7-RLuc-YFP)	Expression in mature pancreatic endocrine beta (B)-cells.	Vincent Poitout (CRCHUM)	RRRC #00757	CP
Liver	Alb (sp)/ DsRed	Wistar-Tg(Alb-DsRed2)	Ds red expression is seen in the liver of fetuses for both sexes. Ds red expression is seen in the liver of young adult males but not in the liver of young adult females.	[15]		CP
Ubiquitous	mCMV/TRE /GFP	SD-Tg (mCMV/TRE-eGFP)	Dox-controlled ubiquitous expression	Y.Agca (U.Missouri)		CP
	CAG /GFP	LEW-Tg(CAG-EGFP)	Ubiquitous eGFP expression	E. Kobayashi (Jichi Medical School)		L/CP
	CAG / GFP	LEW-Tg (CAG-GFP)	High Ubiquitous expression and in cultured-neurospheres	[16,17]		
	CAG /GFP	Wistar-TgN(CAG-GFP)	Ubiquitous eGFP expression	[18,19]		CP
	CAG /GFP	Wistar-Tg(CAG-GFP)	Moderate to high ubiquitous expression	[18]		
	CAG /GFP	Wistar-Tg(CAG-GFP)	Weak to strong Dependent of developmental stage	[20]		
	CAG /GFP	Wistar-Tg(CAG-GFP)	Moderate expression in Kidney, Testis, Lung, Spleen, some cerebral area, spinal cord and cultured-neurospheres	[21]		
	CAG / GFP	SD-Tg(CAG-EGFP)		Masaru Okabe Osaka University		L
		SD-KI Rosa26-GFP		[22]		
		DA/Wistar-KI Rosa26-tdTomato		[23]		
		DA/KI Sox10-dsRed	Neonatal brain ; oligodendrocyte lineage	[24]		
		Wistar/Rosa26-KI H2B-tdTomato	oocyte nuclei (MII phase; PN; from 2c up to blastocyste)	[25]		
	UbC / GFP	SD-Tg(UbC-eGFP/ Dazl-shRNA)	knockdown of the Dazl gene. GFP expression in males but silenced in females (unknown reasons)	[26]		CP
	UbC / GFP	F344-Tg(UbC-eGFP)	Ubiquitous eGFP expression	[27]		L/CP
	UbC / GFP	SD-Tg (UbC /WRE-GFP)	Weak and variable between individual rats Kidney, Testis, Lung, Spleen, some cerebral area, spinal cord	[21]		
	Pgk / GFP	SD-Tg (PGK-GFP)	High to low expression	[28]		L/CP
	Rosa / Luciferase	LEW-Tg(Rosa-luc)		[29]		
	HIV / LacZ	SD-Tg(HIV-LacZ)	HIV-LacZ transgenic rats display immune tolerance towards B-galactosidase so that LacZ expression is not silenced. Ubiquitous LacZ tissue expressio	[30,31]		CP

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