

ジャクソン研究所 Cre マウス

Available JAX Cre strains

Available JAX Cre strains

The Jackson Laboratory offers over 300 cre tool strains.

Listed by promoter, including site of expression:

Research Tools: Cre-lox System

- [Cre Recombinase Expression](#)
- [Cre-Recombinase Expression: Germline/Embryonic Expression](#)
- [Cre-Recombinase Expression: Inducible](#)
- [loxP-flanked Sequences](#)
- [loxP-flanked Sequences: Test/Reporter](#)

Related technology: FLP-FRT system

- [FLP Recombinase Expression](#)
- [FLP Recombinase Expression: Germline/Embryonic Expression](#)
- [FLP Recombinase Expression: Inducible](#)
- [FRT-flanked Sequences](#)
- [FRT-flanked Sequences: Test/Reporter](#)

<http://cre.jax.org/strainlist.html> より

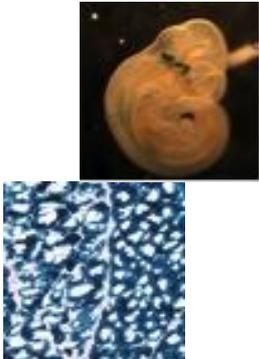
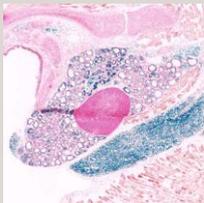
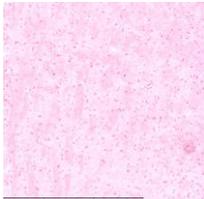
2014年2月
日本チャールス・リバー（株）

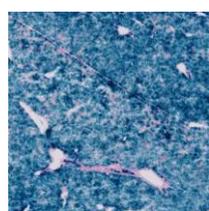
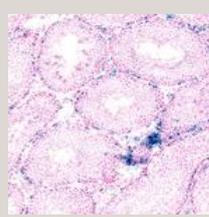
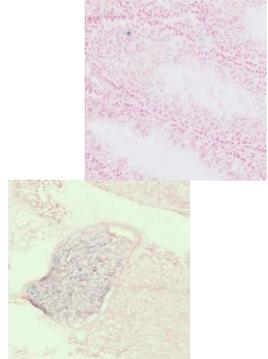
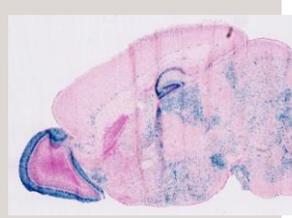
Cre lines characterized by the JAX Cre Resource

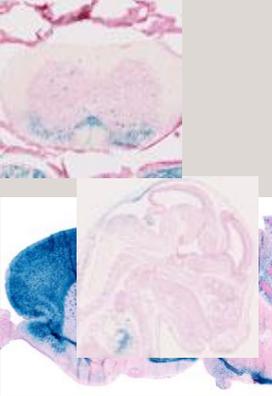
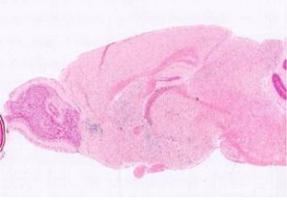
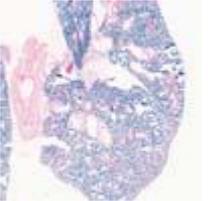
The list of characterized Cre lines below is **alphabetical by promoter**. FaceBase Resource strains and inducible Cre strains are at the bottom of the table.

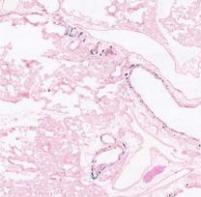
The Jackson Laboratory Cre Repository uses the following LacZ Staining protocols:

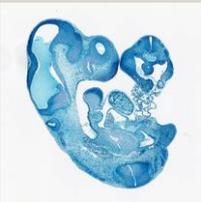
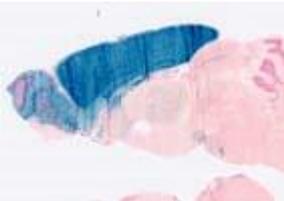
[JAX Cre Repository LacZ Staining](#)

Stock number(links to data sheet)	Strain name (links to expression data)	Promoter (species)	Expected site of expression	Expression data thumbnail
006149	B6.Cg-Tg(ACTA1-cre)79Jme/J	<i>ACTA1</i> (human)	Cre activity is restricted to adult striated muscle fibers and embryonic striated muscle cells of the somites and heart.	
010803	B6;FVB-Tg(Adipoq-cre)1Evdv/J	<i>Adipoq</i> , adiponectin, C1Q and collagen domain containing (mouse)	Cre recombinase activity is expected in white adipose tissue (WAT) and brown adipose tissue (BAT)	
012899	STOCK <i>Agrp</i><tm1(cre)Lowl>/J	<i>Agrp</i> (mouse)	ArGP neurons in the hypothalamus	
003574	B6.Cg-Tg(Alb-cre)21Mgn/J	<i>Alb</i> , albumin (rat)	Cre recombinase expression is expected in the Liver	

016832	B6.FVB(129)-Tg(Alb1-cre)1Dlr/J	<i>Alb1</i> , albumin (mouse)	Cre recombinase expression is expected in the Liver	
007915	129S.FVB-Tg(Amh-cre)8815Reb/J	<i>Amh</i> (mouse)	Testis Sertoli cell-specific promoter elements of the anti-Mullerian hormone (<i>Amh</i>) gene	
006881	B6.Cg-Tg(Aqp2-cre)1Dek/J	<i>Aqp2</i> (mouse)	Transgenic <i>cre</i> activity, directed by the mouse aquaporin 2 promoter, is observed in kidney cells (collecting duct, left) and testes (sperm, right).	
010774	B6(Cg)-Calb2<tm1(cre)Zjh>/J	<i>Calb2</i> , calbindin 2	Cre activity is expected in calretinin interneurons in the brain and cortex driven by the endogenous <i>Calb2</i> promoter/enhancer elements	
005359	B6.Cg-Tg(Camk2a-cre)T29-1Stl/J	<i>Camk2a</i> , calcium/calmodulin-dependent protein kinase II alpha (mouse)	Cre recombinase expression is expected in the forebrain, specifically the CA1 pyramidal cell layer in the hippocampus	

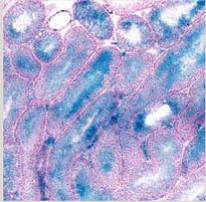
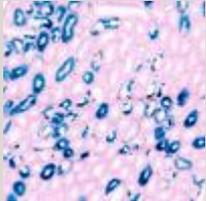
012706	STOCK <i>Cck<tm1.1(cre)Zjh>/J</i>	<i>Cck</i> , cholecystokinin (mouse)	<p>Cre recombinase activity is expected in cholecystokinin positive neurons (interneurons) of the cortex.</p> <p>Expression also seen in Adult spinal cord and embryonic day 15.5 spinal cord and heart (bottom left and right).</p>	
008520	B6.Cg-Tg(CD2-cre)4Kio/J	CD2, CD2 molecule (human)	<p>Cre recombinase activity is expected in T cells and B cells (all committed B cell and T cell progenitors)</p>	
004126	C.Cg-Cd19<tm1(cre)Cgn> Ighb/J	<i>Cd19</i>	<p>Cre recombinase expression is expected in B cells</p>	
006137	B6.Cg-Tg(Cdh5-cre)7Mlia/J	<i>Cdh5</i> , cadherin 5	<p>Embryonic and adult cre recombinase activity is reported in endothelium of developing and quiescent vessels of all organs examined, as well as within a subset of hematopoietic cells</p>	

012237	B6.Cg-Tg(Cdh16-cre)91Igr/J	<i>Cdh16</i> (mouse)	In the adult mouse expression is limited to the renal tubules especially the collecting ducts, loops of Henle and distal tubules.	
006410	B6;129S6-Chat<tm1(cre)Lowl>/J	<i>Chat</i> , choline acetyltransferase (mouse)	Cre recombinase activity is reported in all cholinergic neurons	
010910	STOCK <i>Cort</i> <tm1(cre)Zjh>/J	<i>Cort</i> , cortistatin	Cre recombinase expression is expected in <i>Cort</i> -expressing cells (CST positive neurons)	
012704	B6(Cg)-Crh<tm1(cre)Zjh>/J	<i>Crh</i> , corticotropin releasing hormone	Cre recombinase activity is expected in CRH positive neurons	
008839	B6;C3-Tg(Cyp39a1-cre)1Aibs/J	<i>Cyp39a1</i> , cytochrome P450, family 39, subfamily a, polypeptide 1 (mouse)	Cre recombinase expression is directed to cerebral cortex, hippocampus, striatum, olfactory bulb, and cerebellum	
008199	STOCK Tg(<i>dlx6a</i> -cre)1Mekk/J	<i>dlx6a</i> , distal-less homeobox gene 6a	Cre recombinase activity is expected in GABAergic forebrain neurons	

003314	FVB/N-Tg(EIIa-cre)C5379Lmgd/J	Ela, adenovirus (adenovirus)	Cre recombinase activity is expected in a wide range of tissues, including the germ cells that transmit the genetic alteration to progeny	
005628	B6.129S2-Emx1<tm1(cre)Krj>/J	<i>Emx1</i> , empty spiracles homolog 1 (Drosophila)	Cre recombinase activity is reported in neurons of the neocortex and hippocampus, and in the glial cells of the pallium, mimicking the pattern of expression of the endogenous gene	
007916	STOCK <i>En1</i> <tm2(cre)Wrst>/J	<i>En1</i> , engrailed 1	Cre recombinase activity is expected in spinal cord V1 interneurons, the embryonic mesencephalon and rhombomere 1 by E9, as well as in the ventral ectoderm of the limbs, in a subset of somite cells, and some mesoderm-derived tissues.	
005069	B6.Cg-Tg(Fabp4-cre)1Rev/J	<i>Fabp4</i> , fatty acid binding protein 4	Cre recombinase activity is reported in brown and white adipose tissue.	

010802	STOCK <i>Gad2<tm2(cre)Zjh>/J</i>	<i>Gad2</i> , glutamic acid decarboxylase 2	Cre recombinase activity is expected in <i>Gad2</i> positive neurons	
004600	FVB-Tg(<i>GFAP-cre</i>)25Mes/J	<i>GFAP</i> , glial fibrillary acidic protein (human)	Cre recombinase activity is reported in the central nervous system, affecting astrocytes, oligodendroglia, ependyma and some neurons; also periportal cells of the liver	
012887	B6.Cg-Tg(<i>Gfap-cre</i>)77.6Mvs/J	<i>Gfap</i> (mouse)	Cre recombinase activity is targeted to most astrocytes throughout the healthy brain and spinal cord and to essentially all astrocytes after Central Nervous System (CNS) injury. Cre recombinase activity is also targeted to a subpopulation of the adult stems in the subventricular zone.	
006474	C57BL/6-Tg(<i>Grik4-cre</i>)G32-4Stl/J	<i>Grik4</i> , glutamate receptor, ionotropic, kainate 4 (mouse)	Cre recombinase activity is reported at 14 days old in area CA3 of the hippocampus, and at 8 weeks of age,	

recombination is observed in nearly 100% of pyramidal cells in area CA3; recombination is also observed in other brain areas, but at distinctly lower frequencies

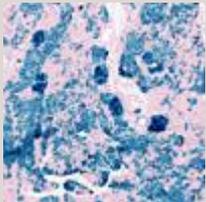
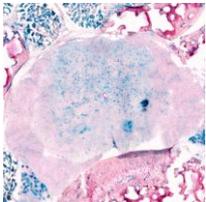
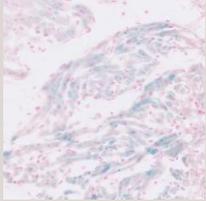
008870	C57BL/6-Tg(Hspa2-cre)1Eddy/J	<i>Hspa2</i> , heat shock protein 2 (mouse)	Cre recombination is expected to occur in leptotene/zygotene spermatocytes	
003573	B6.Cg-Tg(Ins2-cre)25Mgn/J	<i>Ins2</i> , insulin 2 (rat)	Cre recombinase activity is expected in pancreatic beta cells, as well as the hypothalamus	
008068	B6.Cg-Tg(Itgax-cre)1-1Reiz/J	<i>Itgax</i> , integrin alpha X (mouse)	Cre recombinase activity is expected in CD8 ⁻ , CD8 ⁺ dendritic cells, tissue derived dendritic cells from lymph nodes, lung and epidermis and plasmacytoid dendritic cells	
004782	STOCK Tg(KRT14-cre)1Amc/J	<i>KRT14</i> , keratin 14 (human)	Cre recombinase activity is reported in skin, the oral ectoderm including the dental lamina at 11.75 d.p.c., and the dental epithelium by 14.5 d.p.c.	

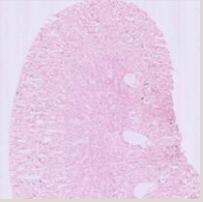
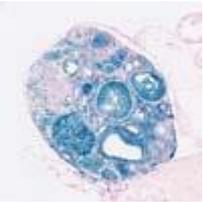
003802	B6.Cg-Tg(Lck-cre)548Jxm/J	<i>Lck</i> , lymphocyte protein tyrosine kinase (mouse)	Cre recombinase activity is reported in thymocytes	
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012837	B6.Cg-Tg(Lck-cre)3779Nik/J	<i>Lck</i> (mouse)	These mice are useful for studying the consequences of mutations induced after positive selection in the thymus.	
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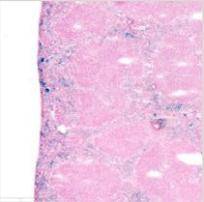
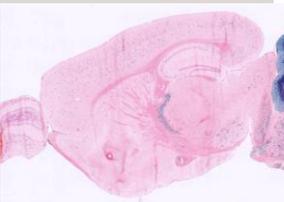
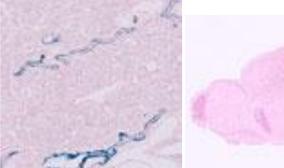
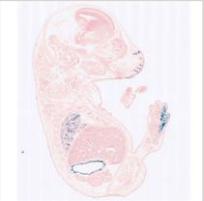
008320	B6.129-Lepr<tm2(cre)Rck>/J	<i>Lepr</i> (mouse)	Cre activity is demonstrable in the hypothalamus (arcuate, dorsomedial, lateral, and ventromedial nuclei), limbic and cortical brain regions (basolateral amygdaloid nucleus, piriform cortex, and lateral entorhinal cortex), and retrosplenial cortex.	
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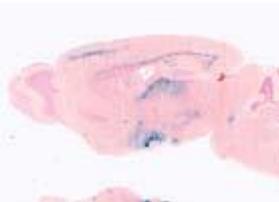
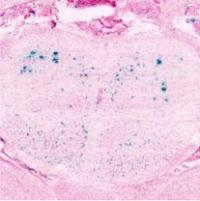
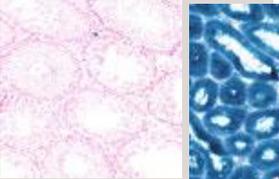
004781	B6.129P2-Lyz2<tm1(cre)Ifo>/J	<i>Lyz2</i> , Lysozyme 2 (mouse)	Cre recombinase activity is reported in myeloid cells, including monocytes, mature macrophages and granulocytes	
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006600	B6.129S1-Mnx1<tm4(cre)Tmj>/J	<i>Mnx1</i> , motor neuron and pancreas homeobox 1 (mouse)	Cre recombinase activity is reported in motor neurons	
007893	B6.129S4-Myf5<tm3(cre)Sor>/J	<i>Myf5</i> , myogenic factor 5	Cre recombinase activity is expected in skeletal muscle and the dermis, and in several ectopic locations	
011038	B6.FVB-Tg(Myh6-cre)2182Mds/J	<i>Myh6</i> (mouse)	Cardiac tissue	
003771	B6.Cg-Tg(Nes-cre)1kln/J	<i>Nes</i> , nestin (rat)	Cre recombinase activity is reported in the central and peripheral nervous system and a few isolated kidney and heart cells	
006333	B6.FVB(Cg)-Tg(Neurog3-cre)C1Able/J	<i>Neurog3</i> , neurogenin 3, (rat)	Cre recombinase activity is expected in islets of the adult pancreas, small intestine enteroendocrine cells, endocrine portions of the stomach, all pancreatic endocrine cells, and in some non-endocrine intestinal cells	

008661	C57BL/6J-Tg(Nkx2-1-cre)2Sand/J	<i>Nkx2-1</i>	Cre recombinase activity is directed to brain interneuron progenitors, developing lung, thyroid, and pituitary by the Nkx2.1 promoter/enhancer regions	
008205	B6.Cg-Tg(NPHS2-cre)295Lbh/J	<i>NPHS2</i> (human)	Cre-recombinase activity is reported in podocytes during late capillary loop stage of glomerular development and persists in podocytes of mature glomeruli	
006364	FVB-Tg(Nr5a1-cre)2Lowl/J	<i>Nr5a1</i> , Nuclear receptor subfamily 5 group A member 1 (mouse)	Cre recombinase activity is reported in Ventromedial Hypothalamus, Cortex, Adrenal Gland, Pituitary Gland and Gonads	
006668	B6;129P2-Omp<tm4(cre)Mom>/MomJ	<i>Omp</i> , Olfactory Marker Protein (mouse)	Cre recombinase activity is reported in mature olfactory sensory neurons	
005549	B6;129-Pax3<tm1(cre)Joe>/J	<i>Pax3</i> , paired box gene 3	Cre recombinase activity is expected in the dorsal neural tube and somites of E9 to 11.5 embryos and in the cardiac neural	

crest cells and colonic
epithelia of E11.5
embryos

008535	C57BL/6-Tg(Pf4-cre)Q3Rsko/J	<i>Pf4</i> , platelet factor 4 (mouse)	Cre activity is expected in the majority of megakaryocytes	
005965	STOCK Tg(Pomc1-cre)16Lowl/J	<i>Pomc1</i> (mouse)	Cre recombinase activity is reported in POMC neurons in the arcuate nucleus of the hypothalamus and scattered in the dentate gyrus of the hippocampus	
008069	B6;129P2-Pvalb<tm1(cre)Arbr>/J	<i>Pvalb</i> , parvalbumin	Cre activity is expected in neurons that express parvalbumin, such as interneurons in the brain and proprioceptive afferent sensory neurons in the dorsal root ganglia	
009613	B6;C3-Tg(Scnn1a-cre)3Aibs/J	<i>Scnn1a</i> (mouse)	Cre expression directed to cortex, thalamus, midbrain, and cerebellum.	
005622	B6.Cg-Shh<tm1(EGFP/cre)Cjt>/J	<i>Shh</i> , sonic hedgehog	Cre activity is expected to follow endogenous Shh expression patterns	

006395	STOCK Tg(Sim1-cre)1Lowl/J	<i>Sim1</i> , single-minded homolog 1 (Drosophila)(mouse)	Cre recombinase activity is expected in all areas that endogenously express <i>Sim1</i> , including paraventricular hypothalamus and other parts of the brain	
006660	B6.SJL-Slc6a3<tm1.1(cre)Bkmn>/J	<i>Slc6a3</i> , solute carrier family 6 (neurotransmitter transporter, dopamine), member 3	Cre recombinase activity is expected in dopaminergic cell groups (substantia nigra (SN) and ventral tegmental area (VTA), as well as in the retrorubral field)	
013044	STOCK <i>Sst</i> <tm2.1(cre)Zjh>/J	<i>Sst</i> , somatostatin	Cre recombinase activity is expected in somatostatin positive neurons (including dendritic inhibitory interneurons such as Martinotti cells and Oriens-Lacunosum-Moleculare cells)	
008208	STOCK Tg(Stra8-cre)1Reb/J	<i>Stra8</i> (mouse)	Stra8-cre transgenic mice may be useful in generating conditional knockouts in postnatal, premeiotic, male germ cells for studying spermatogenesis.	

003966 B6.Cg-Tg(Syn1-cre)671Jxm/J

Syn1 (rat)

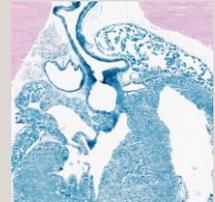
Cre recombinase activity is detected in neuronal cells, including brain, spinal cord and DRGs, as early as E12.5, as well as in neurons in adult.



004746 STOCK Tg(Tagln-cre)1Her/J

Tagln, transgelin (mouse)

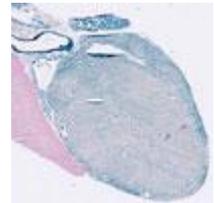
Cre recombinase activity is expected in smooth muscle



006878 B6.129S6-Tagln<tm2(cre)Yec>/J

Tagln (mouse)

Cre recombinase activity is shown in adult smooth muscle cells (such as arteries, veins, and visceral organs) and cardiac myocytes, but activity is not observed in the same embryonic tissues.



006143 FVB/N-Tg(Thy1-cre)1Vln/J

Thy1 (mouse)

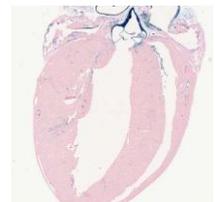
Cre recombinase activity is expected in neurons of the cortex and hippocampus



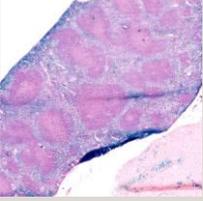
008712 B6.129X1-Twist2<tm1.1(cre)Dor>/J

Twist2, twist basic helix-loop-helix transcription factor 2

Cre recombinase activity is expected in mesoderm as early as embryonic day 9.5, in mesodermal tissues such as branchial arches and somites, and in condensed



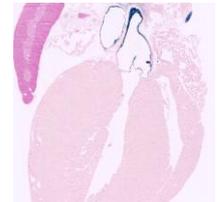
mesenchyme-derived
chondrocytes and
osteoblasts.

008610	B6.Cg-Tg(Vav1-cre)A2Kio/J	<i>Vav1</i> (mouse)	Using crosses to a reporter strain, variegated germline (testis and ovaries), and heart and gut expression is also reported. When bred with mice containing a <i>loxP</i> -flanked sequence of interest, Cre-mediated recombination will result in deletion of the floxed sequence(s) in the offspring. These <i>Vav1</i> -Cre transgenic mice may be useful for generating conditional mutations in hematopoietic cells.	
004586	B6.SJL-Tg(Vil-cre)997Gum/J	<i>Vil1</i> , villin 1 (mouse)	Cre recombinase activity is expected in villi and crypts of the small and large intestine	
010908	STOCK <i>Vip</i> < <i>tm1(cre)</i> <i>Zjh</i> >/J	<i>Vip</i> , vasoactive intestinal polypeptide	Cre recombinase activity has been reported in some GABAergic interneurons	

009107 **B6.Cg-Tg(Wnt1-cre)11Rth**
Tg(Wnt1-GAL4)11Rth/J

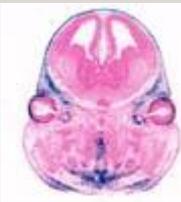
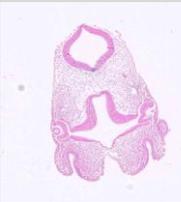
Wnt1,
wingless-related
MMTV integration site
1 (mouse)

Cre recombinase activity is expected in embryonic neural tube, midbrain, dorsal and ventral midlines of the midbrain and caudal diencephalon, the mid-hindbrain junction and dorsal spinal cord

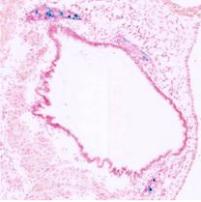
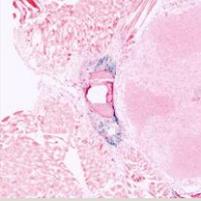
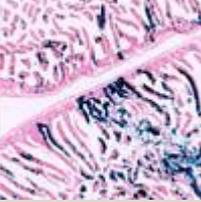


Facebase Tools Cre Strains:

Stock number(links to data sheet)	Strain name (links to expression data)	Promoter (species)	Expected site of expression	Expression data thumbnail
018151	C57BL/6N-Krt17<tm1(cre,Cerulean)Murr>/GrsrJ	<i>Krt17</i> , keratin 17 (mouse)	Cre recombinase expression is driven by the endogenous <i>keratin 17 (Krt17)</i> promoter/enhancer elements	
009388	B6;129S1-Osr2<tm2(cre)Jian>/J	<i>Osr2</i> , odd-skipped related 2 (Drosophila), mouse, laboratory	Cre recombinase activity is reported in developing palate and urogenital tract	
018791	C57BL/6J-Tg(Trp63,-cre,-Cerulean)3Grsr/GrsrJ	<i>Trp63</i> , transformation related protein 63 (mouse)	Cre recombinase expression is driven by <i>Trp63</i> promoter/enhancer elements	

018792	C57BL/6J-Tg(Trp63,-cre,-Cerulean) 4Grsr/GrsrJ	<i>Trp63</i> , transformation related protein 63 (mouse)	Cre recombinase expression is driven by <i>Trp63</i> promoter/enhancer elements	
005584	B6.Cg-Tg(Prrx1-cre)1Cjt/J	<i>Prrx1</i> , paired related homeobox 1 (rat)	Cre recombinase activity is expected in early limb bud mesenchyme and in a subset of craniofacial mesenchyme, along with limited female germline expression	
018754	C57BL/6J-Tg(Tbx22,-cre,-mCherry) 1Grsr/GrsrJ	<i>Tbx22</i> , T-box transcription factor 22 (mouse)	Cre recombinase expression is driven by <i>Tbx22</i> promoter/enhancer elements	
012719	STOCK Tgfb3<tm1(cre)Vk/J	<i>Tgfb3</i> , transforming growth factor, beta 3 (mouse)	Cre recombinase activity is expected in the heart, pharyngeal arches, otic vesicle, mid brain, limb buds, midline palatal epithelium, and whisker follicles during embryo and fetus development	
009107	B6.Cg-Tg(Wnt1-GAL4)11Rth Tg(Wnt1-Cre)11Rth	<i>Wnt1</i> , wingless-related MMTV integration site 1 (mouse)	Cre recombinase activity is expected in embryonic neural tube, midbrain, caudal diencephalon, the mid-hindbrain junction, dorsal spinal cord, and neural crest cells	

Inducible Strains:

Stock number(Links to data sheet)	Strain name (links to expression data)	Promoter (species)	Expected site of expression	Expression data thumbnail
004682	B6.Cg-Tg(CAG-cre/Esr1)5Amc/J	<i>ACTB</i> , actin, beta (chicken)	Tamoxifen-inducible Cre recombinase expression is expected in most tissue types	
006774	FVB-Tg(Col2a1-cre/ERT)KA3Smac/J	<i>Col2a1</i> , collagen, type II, alpha 1 (mouse)	Tamoxifen-inducible cre expression is expected in cells of the chondrogenic lineage (cartilage) during embryogenesis and postnatally.	
010705	B6(Cg)-Dlx5<tm1(cre/ERT2)Zjh>/J	<i>Dlx5</i> , distal-less homeobox 5	Tamoxifen-inducible Cre recombinase activity is expected in the cortex	
005107	STOCK Tg(KRT14-cre/ERT)20Efu/J	<i>KRT14</i> , keratin 14 (human)	Tamoxifen-inducible Cre recombinase expression is expected in keratinocytes	
008875	B6.129P2-Lgr5<tm1(cre/ERT2)Cle>/J	<i>Lgr5</i> , leucine rich repeat containing G protein coupled receptor 5	Tamoxifen-inducible Cre recombinase expression is expected in crypt base columnar cells in	

			small intestine (stem cells of the small intestine) and colon	
005657	B6.FVB(129)-Tg(Myh6-cre/Esr1)1Jmk/J	<i>Myh6</i> , myosin, heavy polypeptide 6,(mouse)	Tamoxifen-inducible Cre recombinase expression is expected in developing and adult heart	
005975	B6.Cg-Tg(Plp1-cre/ERT)3Pop/J	<i>Plp1</i> , proteolipid protein (myelin) 1 (mouse)	Tamoxifen-inducible Cre recombinase expression is expected in oligodendrocytes and Schwann cells	
008085	B6.Cg-Tg(UBC-cre/ERT2)1Ejb/J	<i>UBC</i> , ubiquitin C (human)	Tamoxifen-inducible Cre recombinase expression is expected in all tissue types	
009103	B6;C3-Tg(Wfs1-cre/ERT2)3Aibs/J	<i>Wfs1</i> , Wolfram syndrome 1 homolog (human)	Tamoxifen-inducible Cre recombinase expression is directed to cortex, hippocampus, striatum, thalamus and cerebellum only following tamoxifen administration	

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