

# R26-CAG-LSL-Luc-tdTomato

<b>Nomenclature</b>	C57BL/6Smoc- <i>Gt(ROSA)26Sor</i> <sup>em1(CAG-LSL-luci-2A-tdTomato)Smoc</sup>
<b>Cat. NO.</b>	NM-KI-18051
<b>Strain State</b>	Repository Live

## Gene Summary

<b>Gene Symbol</b> <b>Gt(ROSA)26Sor</b>	<b>Synonyms</b>	R26, ROSA26, AV258896, Gtrg eo26, Gtrosa26, Thumpd3as1
	<b>NCBI ID</b>	<a href="#">14910</a>
	<b>MGI ID</b>	<a href="#">104735</a>
	<b>Ensembl ID</b>	<a href="#">ENSMUSG00000086429</a>

## Model Description

A CAG-loxP STOP-loxP-luci-2A-tdTomato-WPRE-polyA cassette was knocked into the mouse ROSA26 locus . This strain of mice can be mated with mice expressing Cre recombinase so that luciferase and tdTomato fluorescent protein could be expressed for cell tracing.

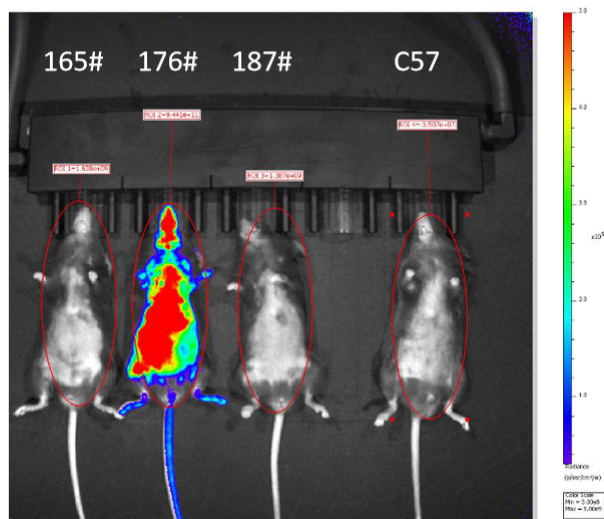
**Research Application:** Cell tracing

\*Literature published using this strain should indicate: R26-CAG-LSL-Luc-tdTomato mice (Cat. NO. NM-KI-18051) were purchased from Shanghai Model Organisms Center, Inc..

## Validation Data

R26-CAG-LSL-luci-tdTomato  
Dppa3-Cre

+ + + -  
- + - -

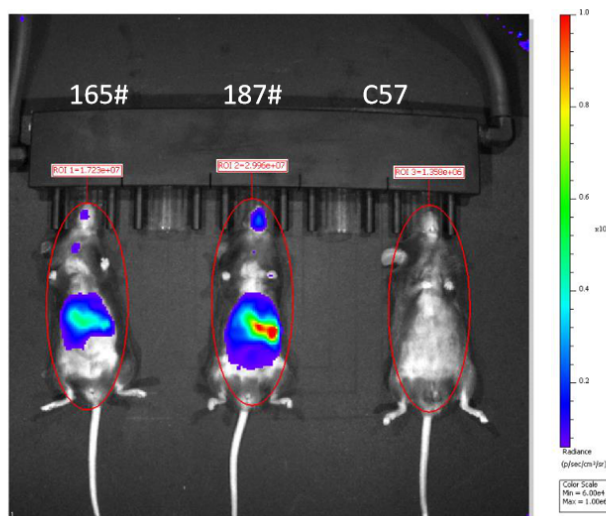


Mice ID	Radiance
165#	1.64E+09
176#	9.44E+11
187#	1.39E+09
C57	3.50E+07

Fig1. In the absence of any stimulation, the in vivo imaging system detected that R26-CAG-LSL-luci-tdTomato(+/-); Dppa3-Cre (+/-) mice showed significant fluorescence.

R26-CAG-LSL-luci-tdTomato  
Dppa3-Cre

+ + -  
- - -



Mice ID	Radiance
165#	1.72E+07
187#	3.00E+07
C57	1.36E+06

Fig2. The in vivo imaging system detected that R26-CAG-LSL-luci-tdTomato(+/-) mice showed some fluorescence. Some 'leaking' was found where luciferase were being expressed at a low level even without Cre.

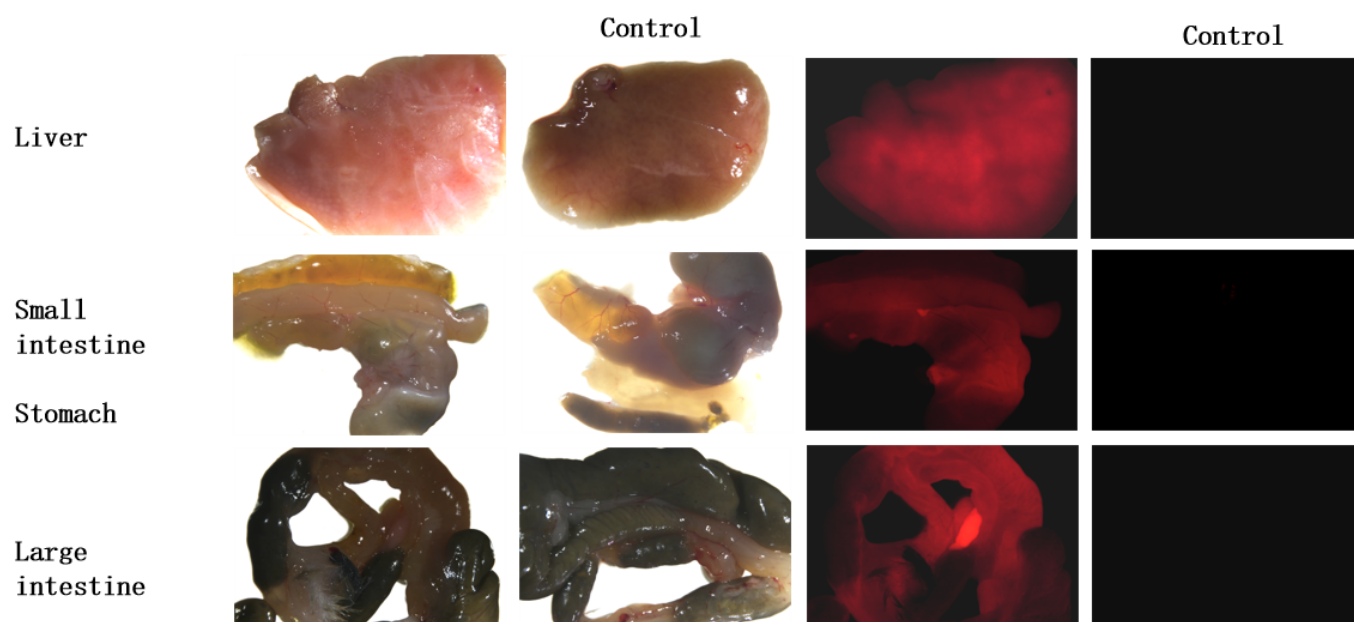


Fig. 3 Detection of tdTomato(red) in the liver, stomach, small intestine and large intestine of  $Dppa3^{Cre/+}$ ;  $Rosa26^{Luc-tdTomato/+}$  mice.

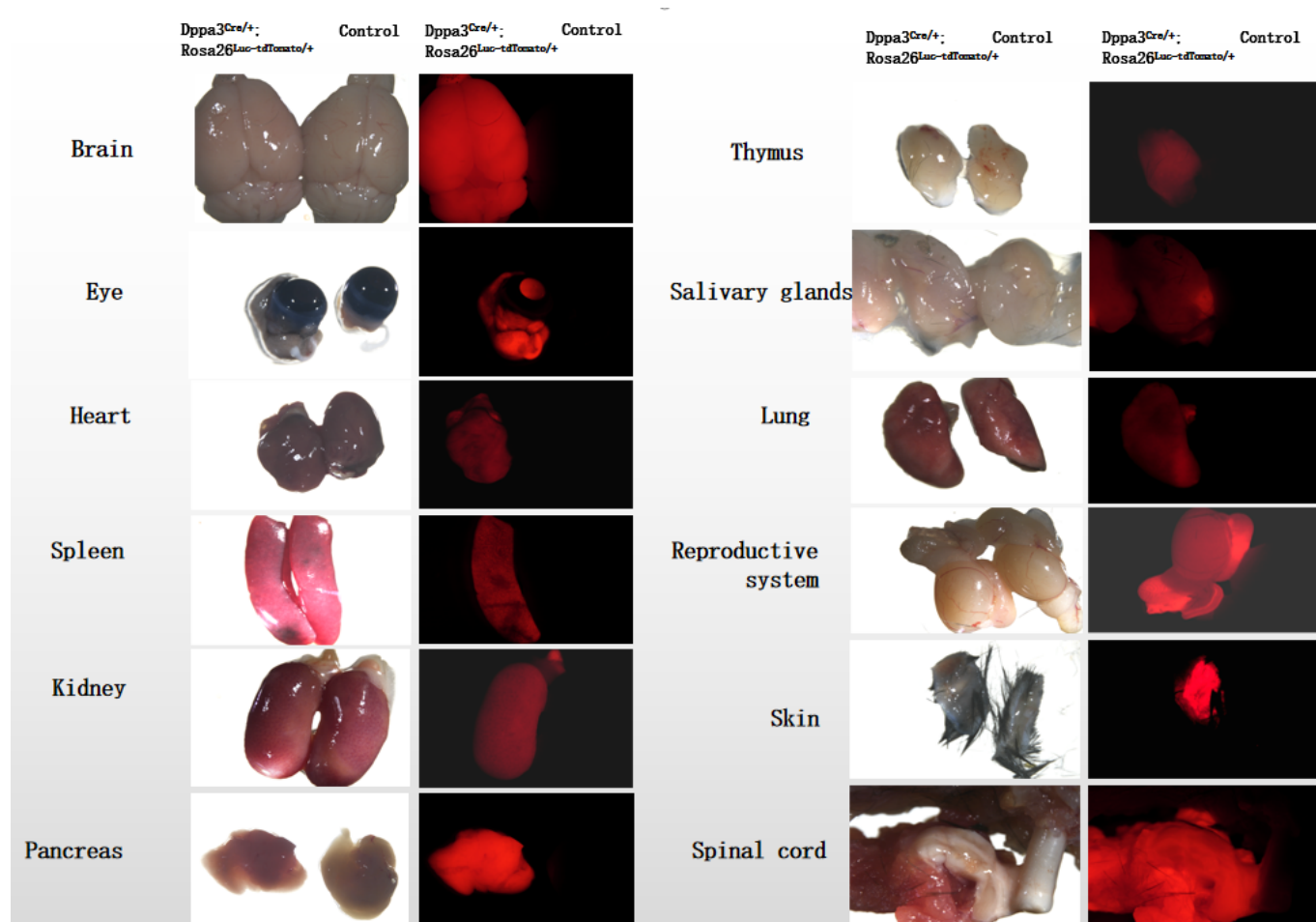


Fig. 4 Detection of tdTomato(red) in various tissues of  $Dppa3^{Cre/+}$ ;  $Rosa26^{Luc-tdTomato/+}$  mice. Tdtomato was expressed in the brain, eye, heart, spleen, kidney, pancreas, thymus, salivary glands, lung, skin, spinal cord, testis and epididymis. (For more detailed information please contact our technical advisor.)

