




C57BL/6J - Tg(Thy1-GCaMP6s)GP4.3D

Stock No: 024275 | GP4.3

 Coisogenic, Transgenic



AVAILABLE

PLACE ORDER

Live mice available in varying quantities. Ask Customer Service for details.

Overview

Also Known As: GP4.3

These transgenic mice, made by the Genetically-Encoded Neuronal Indicator and Effector ([GENIE](#)) Project, express the green fluorescent calcium indicator, GCaMP6s, in subsets of excitatory neurons in the brain and possibly other cell types and tissues. The GCaMP6s indicator is an ultrasensitive detector of single neuronal action potentials and has slow response kinetics.

Donating Investigator

Douglas Kim, Janelia Farm Research Campus, HHMI

[READ MORE +](#)

GENETIC OVERVIEW

Genetic Background

Generation

[N10+pN2F5](#)

(2019-12-27 00:00:00)

[Tg\(Thy1-GCaMP6s\)GP4.3Dkim](#)

Allele Type

Transgenic (Reporter)

[VIEW GENETICS](#)

RESEARCH APPLICATIONS

Neurobiology Research

Research Tools

[VIEW ALL RESEARCH APPLICATIONS](#)

BASE PRICE

Starting at:

[\\$255.00 Domestic price for female 4-week](#)

[333.51 Domestic price for breeder pair](#)

[VIEW PRICE LIST](#)

Details

Detailed Description

These transgenic mice express the green fluorescent calcium indicator GCaMP6s in subsets of excitatory neurons in the brain and possibly other cell types and tissues. The transgene contains a mouse *Thy1* promoter, GCaMP6s, woodchuck hepatitis virus posttranscriptional regulatory element (WPRE), and bovine growth hormone (bGH) polyadenylation sequence. The GCaMP6s indicator is an ultrasensitive detector of single neuronal action potentials and has slow response kinetics ([PMID 23868258](#)). The mice can be used for imaging-based monitoring of neuronal activity in individual neurons in the brain and elsewhere. Stable expression levels in the cortex (motor cortex, somatosensory cortex, and visual cortex of neocortex layers 2/3 and 5) are sufficient for *in vivo* imaging. L2/3 functional imaging experiments require 50-100mW average laser power (940 nm) as compared to alternative

10-25 mW in GCaMP viral transduction protocols. These mice were made by the Genetically-Encoded Neuronal Indicator and Effector ([GENIE](#)) Project at the HHMI's Janelia Farm Research Campus.

Please see the [Neuroscience, 2013 poster](#) for more information. A selection of [whole brain widefield images](#) and an [expression summary table](#) are also available.

[+ Development](#)

[+ Expression Data](#)

[+ Control Suggestions](#)

[+ Selected References](#)

[- Genetics](#)

[+ Tg\(Thy1-GCaMP6s\)GP4.3Dkim](#)

[- Disease/Phenotype](#)

[+ Disease Terms](#)

[+ Research Areas By Genotype](#)

[+ Mammalian Phenotype Terms by Genotype](#)

[+ References](#)

[- Technical Support](#)

C H A T O  F L I N E

C O N T A C T T E C H N I C A L S U P P O R T

Genotyping Protocols

Probe:[GCaMP6s-Probe](#)

Standard PCR:[Tg\(Thy1-GCaMP\)](#)

[Genotyping resources and troubleshooting](#)

Dietary Information

LabDiet® 5K52 formulation (6% fat)

Breeding Considerations

Hemizygotes are viable and fertile.

[Additional Breeding and Husbandry Support](#)

Mating System

Noncarrier x Hemizygote

Hemizygote x Noncarrier

Citation

When using the GP4.3 mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #024275 in your Materials and Methods section.

[Animal Health Reports](#)

[Facility Barrier Level Descriptions](#)

 [AX12 \(Maximum\)](#)

➔ Pricing & Availability



Live mice available in varying quantities. Ask Customer Service for details.

Available

Domestic **International**

Pricing effective for USA, Canada and Mexico shipping destinations

Live Mouse

AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
4 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
5 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
5 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
6 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
6 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
7 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
7 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
8 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
8 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
9 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00

9 weeks	SEX	Noncarrier	\$78.51
	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
10 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
10 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
11 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
11 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51
12 weeks	Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
	Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim	\$255.00
12 weeks	Female	Noncarrier	\$78.51
	Male	Noncarrier	\$78.51

Breeder Pair			PRICE
SEX	GENOTYPE		
Female	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim		\$333.51
Male	Noncarrier		
Female	Noncarrier		\$333.51
Male	Hemizygous for Tg(Thy1-GCaMP6s)GP4.3Dkim		

Related Products and Services		
Frozen Mouse Embryo	C57BL/6J-Tg(Thy1-GCaMP6s)GP4.3Dkim/J	\$2595.00

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