

CAG-LSL-dCas9-SPH-Tg

Nomenclature	C57BL/6Smoc-Tg(CAG-LSL-dCas9-SPH)Smoc
Cat. NO.	NM-TG-00025
Strain State	Repository Live

Gene Summary

Gene Symbol	Synonyms	Null
	NCBI ID	Null
	MGI ID	Null
	Ensembl ID	Null

Model Description

Cre-dependent SunTag-p65-HSF1 (SPH) transgenic mice were generated with piggyBac transposon system in F1 zygotes and crossed with wild type C57BL/6 mice., SPH transgenic mouse containing HA-tagged dCas9 fused with 10xGCN4, which is linked with p65-HSF1 and EGFP in tandem via P2A and T2A respectively. The transgene is driven by the ubiquitous CAG promoter and interrupted by a loxP-stop-loxP (LSL) cassette to render Cas9 expression inducible by the Cre recombinase. Expression of dCas9 can be detected using primary antibody: rabbit monoclonal antibody to HA-tag (1:1000, #3724, CST45) and secondary antibody: goat anti-rabbit Alexa Fluor 488 (1:1000, #A-11034, Thermo Fisher).

Research Application: gene regulation tool,CRISPRa

*Literature published using this strain should indicate: CAG-LSL-dCas9-SPH-Tg mice (Cat. NO. NM-TG-00025) were purchased from Shanghai Model Organisms Center, Inc..

Validation Data

No data

Publications

[In vivo simultaneous transcriptional activation of multiple genes in the brain using CRISPR-dCas9- activator transgenic mice](#)

References: Nature Neuroscience