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Genetically engineered models (GEMS)

tdTomato Reporter knockin rat

MODEL	tdTomato Reporter knockin rat
STRAIN	HsdSage: LE-*Rosa26*$^{em1(tdTomato)Sage}$
LOCATION	U.S.
AVAILABILITY	Live colony

CHARACTERISTICS/HUSBANDRY

- Background strain: Long Evans Hooded

ZYGOSITY GENOTYPE

- Homozygous

RESEARCH USE

- Optogenetics
- Expression of tdTomato fluorescence when Cre-recombinase is introduced

ORIGIN

The tdTomato Reporter knockin rat model was originally created at SAGE Labs, Inc. in St. Louis, MO. The animal inventory was acquired by Envigo in 2019 and then by Inotiv in 2021. The line continues to be maintained through the original SAGE Labs animal inventory and is distributed out of the Boyertown, PA facility.

DESCRIPTION

This model possesses the fluorophore tdTomato, sitting behind a floxed stop codon in the Rosa26 locus under control of the CAG promoter. By introducing Cre-recombinase through viral transduction or crossing with one of our Cre-driver rats, tdTomato fluorescence will be observed anywhere Cre- is expressed. The tdTomato Reporter rat is useful for applications requiring tissue specific expression, including optogenetics and breeding with Cre-driver lines.