

***Aedes aegypti*, Strain PUB-GCaMP6s, Eggs**

Catalog No. NR-51480

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

Centers for Disease Control and Prevention, Atlanta, Georgia, USA

Product Description:

Classification: *Culicidae*, *Aedes*

Species: *Aedes aegypti*

Strain: PUB-GCaMP6s

Original Source: *Aedes aegypti* (*Ae. aegypti*), strain PUB-GCaMP6s was derived from wild-type strain Liverpool.^{1,2}

Genotype: *Ae. aegypti*, strain PUB-GCaMP6s, is a transgenic strain expressing a genetically encoded calcium indicator termed GCaMP6s under the control of the *polyubiquitin* (*PUB*) (AAEL003877) promoter.^{1,2}

Comments: *Ae. aegypti*, strain PUB-GCaMP6s was generated by the introduction of a piggyBac transposon containing the *PUB* (AAEL003877) promoter upstream of the coding sequence for GCaMP6s which causes the expression of GFP in presence of calcium. Downstream of GCaMP6s, Opie2 promoter driven dsRed expression was included to serve as a transgenesis marker.^{1,2}

Material Provided:

NR-51480 contains a suitable number of live eggs to establish a stock. Eggs are provided on damp filter paper and should be hatched immediately upon receipt.

Packaging/Storage:

NR-51480 is prepared and shipped by the CDC. The product is provided at room temperature.

Growth Conditions:

Standard *Ae. aegypti* rearing procedures are recommended. This line can be phenotypically identified using a fluorescent microscope during the larval stage by a bright expression of dsRed in the abdomen, GFP throughout the body and the presence of black eye color. Thus, the colony should be scanned for fluorescence and bright individuals with black eye colors should be selected to maintain the transgenic line.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Aedes aegypti*, Strain PUB-GCaMP6s, Eggs, NR-51480.

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. [Biosafety in Microbiological and Biomedical Laboratories \(BMBL\)](#), 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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References:

1. Akbari, O., Personal Communication.
2. Bui, M., et al. "Live Calcium Imaging of *Aedes aegypti* Neuronal Tissues Reveals Differential Importance of Chemosensory Systems for Life-History-Specific Foraging Strategies." *BMC Neurosci.* 20 (2019): 27. PubMed: 31208328.

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