

Aedes aegypti, Strain CKR

Catalog No. NR-59592

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/Isolate: CKR

Common Name: yellow fever mosquito

Pathogens for which vector is competent: Yellow fever virus, Dengue virus, chikungunya virus and Zika virus

Original Source: *Aedes aegypti* (*Ae. aegypti*), strain CKR was isolated in 2009 in Singapore.¹

Comments: *Ae. aegypti*, strain CKR is permethrin-resistant and is congenic to insecticide susceptible Rockefeller strain (ROCK), but has knockdown resistance (*kdr*) with S989P and V1016G mutations in the voltage-sensitive sodium channel (*vssc*), along with cytochrome P450 enzyme (CYP)-mediated resistance mechanisms from the Singapore strain.^{1,2,3}

Material Provided:

Each shipment consists of live eggs at room temperature.

Packaging/Storage:

NR-59592 prepared and shipped by the CDC. The product is provided at room temperature.

Growth Conditions:

Standard *Ae. aegypti* rearing procedures are recommended.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Aedes aegypti*, Strain CKR, NR-59592.

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. Scott, J., Personal Communication.
2. Smith, L.B., et al. "CYP-mediated Permethrin Resistance in *Aedes aegypti* and Evidence for Trans-regulation." *PLoS. Negl. Trop. Dis.* 12 (2018): 12: e0006933. PubMed: 30452436.
3. Smith, L.B., S. Kasai and J.G. Scott. "Voltage-sensitive Sodium Channel Mutations S989P + V1016G in *Aedes aegypti* Confer Variable Resistance to Pyrethroids, DDT and Oxadiazines." *Pest. Manag. Sci.* 74 (2018): 737-745. PubMed: 29064635.

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