

# **Product Information Sheet for MRA-1280**

# Anopheles gambiae, Strain AKDR, Eggs Catalog No. MRA-1280

# For research use only. Not for human use.

#### Contributor:

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#### Manufacturer:

CDC, Atlanta, Georgia, USA

# **Product Description:**

Classification: Diptera, Culicidae, Anopheles

<u>Species</u>: Anopheles gambiae (common name: African malaria mosquito) (The mosquito species complex Anopheles gambiae M form strains may also be referred to as Anopheles coluzzii, since a new species designation for these strains has been proposed.)<sup>1</sup>

Strain: AKDR

Original Source: The Anopheles gambiae (A. gambiae) AKDR colony was derived from A. gambiae, strain AKRON (BEI Resources MRA-913) for pyrethroid resistance in October 2013.<sup>2</sup> The AKRON parent strain was isolated in Akron, Porto Novo, Benin.<sup>3</sup>

<u>Comment</u>: A. gambiae, strain AKDR was deposited as L1014F [knockdown resistance (KDR)] genotype and pyrethroid resistance (broad spectrum) phenotype.<sup>2</sup>

#### **Material Provided:**

MRA-1280 contains a suitable number of eggs to establish a stock. Eggs are provided on damp filter paper and should be hatched immediately upon receipt.

# Packaging/Storage:

MRA-1280 is prepared and shipped by CDC. The product is provided at room temperature.

#### **Growth Conditions:**

Standard *A. gambiae* rearing methods are recommended.<sup>4,5</sup> Mosquitoes should be reared in an insectary at 27°C and 80% relative humidity under a 12:12 photoperiod, allowing to feed on a live animal for blood to propagate the strain.<sup>2</sup>

# Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Anopheles gambiae*, Strain AKDR, Eggs, MRA-1280, contributed by Ellen Dotson."

#### 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. <u>Biosafety in Microbiological and Biomedical Laboratories</u>. 5th ed.

Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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#### References:

- Coetzee, M., et al. "Anopheles coluzzii and Anopheles amharicus, New Members of the Anopheles gambiae complex." Zootaxa 3619 (2013): 246-274. PubMed: 26131476.
- 2. Dotson, E., Personal Communication.
- Mutunga, J. M., et al. "Carbamate and Pyrethroid Resistance in the Akron Strain of *Anopheles gambiae*." <u>Pestic. Biochem. Physiol.</u> 121 (2015): 116-121. PubMed: 26047119.
- Benedict, M. Q. "Care and Maintenance of Anopheline Mosquito Colonies." In <u>The Molecular Biology of Insect</u> <u>Disease Vectors</u>. (1997) Crampton, J. M., C. B. Beard and C. Louis (Eds.), Chapman & Hall: New York, pp. 2-12.
- 5. Methods in Anopheles Research.

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