

**Anopheles quadriannulatus, Strain SANGWE, Bulk Frozen**

**Catalog No. MRA-1155B**

**For research use only. Not for human use.**

**Contributor:**

Willem Takken, Ph.D., Professor, Department of Entomology, Wageningen University, the Netherlands

**Manufacturer:**

Centers for Disease Control and Prevention (CDC), Atlanta, Georgia, USA

**Product Description:**

Classification: Culicidae, *Anopheles*

Species: *Anopheles quadriannulatus*

Strain: SANGWE (deposited in November 2010 as *Anopheles quadriannulatus* A, SANGQUA)<sup>1</sup>

Original Source: The *Anopheles quadriannulatus* (*An. quadriannulatus*), strain SANGWE colony originated from female mosquitoes collected in 1999 by Dr. Richard Hunt near the Sabi River in Sangwe, Zimbabwe.<sup>1,2</sup> Eggs from these females were used to establish the colony, which was maintained by membrane feeding using cattle blood.<sup>1,2</sup>

Comments: The wild-type SANGWE strain was karyotyped as 2L+; Xf+/f heterozygous.<sup>3</sup> The complete genome of *An. quadriannulatus*, strain SANGWE is being sequenced (BioProject: [PRJNA67511](https://www.ncbi.nlm.nih.gov/bioproject/PRJNA67511)).<sup>3</sup>

Applications: MRA-1155B is suitable for DNA and RNA isolation, protein extraction, etc.

**Material Provided:**

Each tube of MRA-1155B contains at least 100 adult male and female wild-type *An. quadriannulatus*, strain SANGWE mosquitoes<sup>5</sup>, which were preserved in liquid nitrogen (quick-frozen) while alive.

**Packaging/Storage:**

MRA-1155B is prepared and shipped by CDC. The product is provided frozen and should be stored at -80°C or colder immediately upon arrival.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Anopheles quadriannulatus*, Strain SANGWE, Bulk Frozen, MRA-1155B, contributed by Willem Takken."

**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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Takken, W., Personal Communication.
2. Pates, H. V., et al. "Unexpected Anthropophilic Behaviour in *Anopheles quadriannulatus*." Med. Vet. Entomol. 15 (2001): 293-298. PubMed: 11583447.
3. Neafsey, D. E., et al. "Mosquito Genomics. Highly Evolvable Malaria Vectors: The Genomes of 16 *Anopheles* Mosquitoes." Science 347 (2015): 1258522. PubMed: 25554792.
4. For details on authentication methods used to confirm the identity of the SANGWE stock, please refer to: [Methods in Anopheles Research](#).

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