

Plasmodium simium, Strain Howler

Catalog No. MRA-353

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For research use only. Not for human use.

Contributor and Manufacturer:

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Product Description:

Protozoa Classification: *Plasmodiidae*, *Plasmodium*

Species: *Plasmodium simium*

Strain: Howler

Original Source: *Plasmodium simium* (*P. simium*), strain Howler was isolated by L. M. Deane in 1966 from howler monkey (*Alouatta fusca*) in southeast Brazil.^{1,2}

Comment: MRA-353 was authenticated by the contributor and deposited in owl monkey (*Aotus nancymai*) blood.²

P. simium is a protozoan parasite from New World monkeys that shares close relationships to *Plasmodium vivax*; it also naturally infects humans and is commonly used in molecular evolution studies of malaria.²⁻⁴

Material Provided:

Each vial of MRA-353 contains approximately 1.0 mL of *P. simium*-infected monkey blood in Glycerolyte solution (1:1.66) at a concentration of > 1,000,000 parasites per vial. **This item is host restricted and must be amplified in monkeys.**

Packaging/Storage:

MRA-353 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -80°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended (-130°C or colder). Freeze-thaw cycles should be avoided.

Growth Conditions²⁻⁴:

In vivo, howler monkey

Alternate host: *Aotus trivirgatus*, *Saimiri sciureus*

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: *Plasmodium simium*, Strain Howler, MRA-353, contributed by William E. Collins."

Biosafety Level: 2

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.

All blood cultures should be handled with appropriate safety precautions necessary for the handling of bloodborne pathogens. Personnel must be trained in accordance with their institutional policy regarding bloodborne pathogens.

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References:

1. Da Fonseca, F. "[*Plasmodium* of a Primate of Brazil]." Mem. Inst. Oswaldo Cruz 49 (1951): 543-553. PubMed: 14890537.
2. Collins, W. E., Personal Communication.
3. Collins, W. E., P. G. Contacos and E. G. Guinn. "Observations on the Sporogonic Cycle and the Transmission of *Plasmodium simium* da Fonseca." J. Parasitol. 55 (1969): 814-816. PubMed: 4390413.
4. "*Plasmodium simium*." In The Primate Malariae. (2003) Eds. G. R. Coatney, W. E. Collins, McW. Warren and P. G. Contacos, CDC: Atlanta, pp. 153-162.

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