



# Product Information Sheet for MRA-858

## INSECT CELL LINE

**MR4 Number:** MRA-858

**Product Name:** MSQ43

**Unit Size:** 0.5ml

**Concentration:**  $10^7 \text{ ml}^{-1}$  ( $5 \times 10^6$  total cells)

**Source of Cell:** *Anopheles stephensi* Indian wild type

**Cell Lines:** Immortalized: Y

**Quality Control:** Cells tested negative for mycoplasma

**Storage condition:** Liquid N<sub>2</sub>

**Biosafety level:** 1

**Shipped:** Frozen

**Depositor:** S. Luckhart < I. Schneider (WRAIR)

**Propagation:** Culture System: T-25 flask

**Growth Mode:** adherent

**Protocol:** MEM-E5 medium; 5% CO<sub>2</sub> required; harvest with cell scraper; split 1:3 to 1:5 when confluent; slow doubling time may be experienced in suboptimal conditions (72h), investigator reports 20 hr doubling time; cells grow best when seeded and maintained at high density (split at near confluence, reseed at ~30% confluence).

### Media:

MEM – E5 (Minimum Essential Medium enhanced, 5% FBS)  
Used for mosquito cell lines including MRA-858 (*A. stephensi* MSQ43) and *Aedes albopictus* C7-10 cells.

MEM with Earl's salts	440.0 ml
200mM L-glutamine (to 4mM)	10.0 ml
Sterile 10% glucose	5.0 ml
100x Vitamin solution	5.0 ml
NEAA (non-essential amino acids).....	10.0 ml
100x Penicillin/Streptomycin	5.0 ml
Heat Inactivated FBS (to 5%)	25.0 ml

Mix and filter sterilize

Other MEM with Earl's base formulations containing L-glu may be adjusted accordingly to 4mM L-glu.

**Incubation:** 28.0°C and 5% CO<sub>2</sub> atmosphere required, T25 or larger filter capped or loose-capped flask.

**Passage:** Cells are adherent but may be detached and passaged by vigorous pipetting or cell scraping with a cell harvester/rubber

policeman. Trypsin treatment not required and not desirable. If chemical disruption is preferred, trypsin substitutes may be less damaging to cells.

### References:

#### For MSQ43 cell line:

Schneider, Imogene. Establishment of three diploid cell lines of *Anopheles stephensi* (Diptera: Culicidae). *J. Cell Biol.* 42: 603-606, 1969.

#### For MEM E-5 media:

Shih, KM, Gerenday, A and Fallon, AM. 1998. Culture of mosquito cells in Eagle's medium. *In Vitro Cell and Developmental Biology Animal* 34: 629-630.

Anna Gerenday, Ann M. Fallon. 2004. Ecdysone-induced accumulation of mosquito cells in the G1 phase of the cell cycle *Journal of Insect Physiology* 50:831-838.

**Important note:** This reagent was authenticated by the contributor. Please contact [malaria@atcc.org](mailto:malaria@atcc.org) for any comment.

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: Biosafety in Microbiological and Biomedical Laboratories, 4th ed. HHS Publication No. (CDC) 93-8395. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Washington DC: U.S. Government Printing Office; 1999. The text is available online at [www.cdc.gov/od/ohs/biosfty/bmb14/bmb14toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb14/bmb14toc.htm).

### MR4 Replacement Policy

MR4 shall replace reagent if the customer reports it was received damaged. Shipments with problems must be reported within 30 days of receipt. Frozen shipments received thawed or damaged should be reported by the customer to the airline or freight forwarder upon receipt. MR4 should be notified after a claim has been filed to arrange for another shipment.

### Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans.

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#### **Citations regarding use of this material**

**Please remember to reference both MR4 AND THE DEPOSITOR in all publications resulting from the use of this reagent.**

#### **Example of how to reference MR4 reagents:**

In Materials and Methods "*P. falciparum* line Dd2 (MRA-156, MR4, ATCC® Manassas Virginia)...". In the acknowledgment portion: "We thank MR4 for providing us with malaria parasites contributed by (name of depositor)."

#### **Consider Depositing to the MR4!**

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