

Data Sheet

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BCRJ Code:	0343
Cell Line:	Aedes albopictus clone C6/36
Species:	Aedes albopictus
Vulgar Name:	Mosquito, Asian Tiger
Tissue:	Larva, Whole
Growth Properties:	Adherent
Age/Ethnicity:	LARVA /
Applications:	This cell line is useful for the replication of flaviviruses and reportedly can be used to replicate Dengue viruses to high titers. They are also a suitable transfection host
Tumor Formation::	Yes, did form colonies in semisolid medium. No, the cells were not tumorigenic in immunosuppressed mice.
Biosafety:	1
Additional Info:	The cells are non-anchorage dependent, are not tumorigenic and maintain a diploid chromosome number.
Culture Medium:	Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 2 mM L-glutamine, 4500 mg/L glucose and fetal bovine serum to a final concentration of 10%.
Subculturing:	Subcultures are prepared by scraping or by vigorous pipetting. Remove the old medium, add fresh complete culture medium, dislodge cells from the floor of the flask, aspirate and dispense into new flasks. NOTE: For more information on enzymatic dissociation and subculturing of cell lines consult Chapter 12 in Culture of Animal Cells, a manual of Basic Technique by R. Ian Freshney, 6th edition, published by Alan R. Liss, N.Y., 2010.
Subculturing Medium Renewal:	Twice per week



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Subculturing Subcultivation Ratio:

1:4 to 1:10 is recommended

Culture Conditions:

Atmosphere: air, 95%; carbon dioxide (CO₂), 5% Temperature: 28°C

Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

Thawing Frozen Cells:

SAFETY PRECAUTION: It is strongly recommended to always wear protective gloves, clothing, and a full-face mask when handling frozen vials. Some vials may leak when submerged in liquid nitrogen, allowing nitrogen to slowly enter the vial. Upon thawing, the conversion of liquid nitrogen back to its gas phase may cause the vial to explode or eject its cap with significant force, creating flying debris.

1. Thaw the vial by gently agitating it in a 37°C water bath. To minimize contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as its contents are thawed and decontaminate it by dipping in or spraying with 70% ethanol. From this point, all operations must be performed under strict aseptic conditions.
3. For cells sensitive to DMSO, it is recommended to remove the cryoprotective agent immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL of complete culture medium and centrifuge at approximately 125 × g for 5 to 7 minutes.
4. Discard the supernatant and resuspend the cell pellet in the recommended complete medium (see specific batch information for the appropriate dilution ratio).
5. Incubate the culture under appropriate atmospheric and temperature conditions (see "Culture Conditions" for this cell line).

NOTE: It is important to avoid excessive alkalinity of the medium during cell recovery. To minimize this risk, it is recommended to place the culture vessel containing the growth medium in the incubator for at least 15 minutes before adding the vial contents. This allows the medium to stabilize at its normal pH (7.0 to 7.6).

References:

Igarashi A. Isolation of a Singh's Aedes albopictus cell clone sensitive to Dengue and Chikungunya viruses. J. Gen. Virol. 40: 531-544, 1978. PubMed: 690610 Singh KRP. Cell cultures derived from larvae of Aedes albopictus (Skuse) and Aedes aegypti (L.). Curr. Sci. 36: 506-508, 1967. Clone C6/36 was derived from A. albopictus cells (see ATCC CCL-126) which were adapted to Eagle's minimum essential medium by A. Igarashi and then cloned and recloned by seeding single cell suspensions into petri dishes.

Depositors:

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