

B95-8 Cells | 601102

General information

Description

The B95-8 cell line is an immortalized marmoset B lymphoblastoid line, derived from the peripheral blood leukocytes of a cotton-top marmoset (*Saguinus oedipus*). This cell line was established through infection with the Epstein-Barr virus (EBV), which is a common method for immortalizing B cells. The presence of EBV is central to the B95-8 line's utility in research, particularly for studies related to viral oncology, virus-host interactions, and the biology of EBV itself.

B95-8 cells are frequently used as a source of Epstein-Barr virus in virology research. They produce infectious virus particles, making them an invaluable tool for the propagation of EBV and for experiments requiring active virus. Additionally, this cell line has been instrumental in the development of vaccines and therapeutic strategies against EBV-associated diseases, including Burkitt's lymphoma and Hodgkin's lymphoma. The cells are also relevant in the study of the immune response to EBV, as they can be used to model the transformation of B cells and to understand the mechanisms of EBV-induced tumorigenesis.

Organism Cotton-top tamarin

Tissue Blood

Synonyms B95.8, B 95.8, B 95-8, B-95-8, B958, GM07404, GM07404A, GM07404D

Characteristics

Gender Female

Morphology Lymphoblast

Growth properties Suspension

Identifiers / Biosafety / Citation

Citation B95-8 (Cyton catalog number 305152)

Biosafety level 2

Expression / Mutation

Handling

B95-8 Cells | 601102

Culture Medium RPMI 1640, w: 2.1 mM stable Glutamine, w: 2.0 g/L NaHCO₃ (Cytion article number 820700a)

Medium supplements Supplement the medium with 10% FBS

Subculturing Gently homogenize the cell suspension in the flask by pipetting up and down, then take a representative sample to determine the cell density per ml. Dilute the suspension to achieve a cell concentration of 1×10^5 cells/ml with fresh culture medium, and aliquot the adjusted suspension into new flasks for further cultivation.

Split ratio 1:2 to 1:4

Fluid renewal 2 to 3 times per week

Freeze medium CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)

Handling of cryopreserved cultures

1. Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
2. Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
3. For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
4. Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
5. Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
6. Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium. Optionally, skip centrifugation but remove any remaining freezing medium after 24 hours.
7. Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
8. Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

Quality control / Genetic profile / HLA

Sterility

Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods.

To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.