Designation: EB1

Origin and General Characteristics

Organism: *Homo sapiens* (human)
Ethnicity: Black
Age: 9 years of age
Gender: Female
Tissue: Burkitt Lymphoma
Morphology: Lymphoblast
Cell type: B lymphocyte

Growth Properties:

Description:
The EB1 cell line was isolated by M.A. Epstein and Y.M. Barr in 1963 from biopsy fragments and cell clumps of a lymphoma. These were seeded into Insulin bottles in Eagle’s basal medium with 10% human serum and fed by medium addition. The cells grew as free-floating single individuals or doublets with a mean doubling time of about 48 hrs and were identified as altered lymphoblasts on the basis of growth and uniform morphology.

References:

Culture Conditions and Handling

Culture Medium:
RPMI 1640 medium supplemented with L-glutamine, and 10% fetal bovine serum (MG-70, CLS order number 820700). Please add sodium pyruvate to the medium.

Subculturing:
The cells should be subcultured by transferring part of the suspension into fresh new cell culture flasks prefilled with fresh medium. Alternatively, the clusters may be collected by centrifugation and resuspended in fresh medium.

Split Ratio: A ratio of 1:3 is recommended
Seeding density: 100,000 cells/ml
Fluid Renewal: 2 to 3 times weekly
Doubling time: About 2 days
Freeze Medium: CM-ACF (CLS order no. 800625, 25ml; 800650, 50ml).
Freezing recovery: After thawing, allow the cells to recover from the freezing process for at least 24 hrs.
Sterility: Mycoplasma specific PCR: negative

Biosafety Level: 1

Safety precautions:
If the cryovial is planned to be stored in liquid nitrogen and to be thawed in the future, special safety precautions should be followed:
Protective gloves and clothing should be used and a facemask or safety goggles must be worn when transferring frozen samples into or removing from the liquid nitrogen tank.
The removal of a cryovial from liquid nitrogen may result in the explosion of the frozen vial creating flying fragments.

Special Features of the Cell Line
Viruses: SMRV: Negative, as confirmed by Real-Time PCR
Contains Herpesvirus

Karyotype: Chromosome Frequency Distribution 30 cells: 2n = 46
The cell line is aneuploid human female, with chromosome counts in the near diploid-range. Normal chromosomes N8, N11 and N14 are monosomal, with the remainder of autosomes usually being paired. The X chromosome most often is trisomic. Four marker chromosomes are found. Two of these (markers M1 and M3) involve the reciprocal translocation between chromosomes N8 and N14 associated with most Burkitt's lymphoma cell lines first described by L. Zech et al., Int.J.Cancer 17: 47, 1976, with the further elaboration of the myc and Ig gene role by the reports of P. Leder, R. Taub and C.M. Croce (Science Washington DC) 222: 765, 1983; PNAS USA 79: 7824 and 7837, 1982.

DNA Profile (STR):

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<thead>
<tr>
<th>Marker</th>
<th>Allele 1</th>
<th>Allele 2</th>
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<tr>
<td>Amelogenin: X</td>
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<td>CSF1PO:</td>
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<td>FGA:</td>
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</table>

Isoenzymes:
PGM1; ESD1; GLO-1; G6PD, B.

Certificate of Analysis: The Certificate of Analysis for each batch can be requested by e-mail at service@clsgmbh.de.

Recommendations for handling of cells growing in suspension following delivery

Cryopreserved cells
The cells come deep-frozen shipped on dry ice. Please make sure that the vial is still frozen. If immediate culturing is not intended, the cryovial(s) must be stored below -150°C after arrival. If immediate culturing is intended, please follow these instructions:
Quickly thaw by rapid agitation in a 37°C water bath within 40-60 seconds. The water bath should have clean water containing an antimicrobial agent. As soon as the sample has thawed, remove the cryovial from the water bath. Note: A small ice clump should still remain and the vial should still be cold. From now on, all operations should be carried out under aseptic conditions.
Transfer the cryovial to a sterile flow cabinet and wipe with 70% alcohol. Carefully open the vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of culture medium (room temperature). Resuspend the cells carefully. Centrifuge at 300xg for 3 min and discard the supernatant. The centrifugation step may be omitted, but in this case the remains of the freeze medium have to be removed 24 hours later. Resuspend the cells carefully in 10ml fresh cell culture medium and transfer them into one T25 cell culture flask. All further steps are described in the Subculture section.

Proliferating Cultures
The cell culture flask, 1xT25, comes filled with cell culture medium. Incubate at 37°C for a minimum of 24 hrs. Count the cells, spin down the cell suspension at 300 x g for 3 minutes to collect the cells. Resuspend the cells in an appropriate amount of fresh cell culture medium and transfer to new cell culture flasks. Incubate at 37°C for a minimum of 24 hrs.

Warranty: CLS warrants for a high cell viability and culture performance only if the product(s) is (are) stored and cultured according to the information described above. Using cell culture media and supplements other than the ones recommended in this product information may result in satisfactory proliferation and viabilities. CLS, however, does not warrant for cell recovery, proliferation and function if differing formulations are employed.
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