

Data Sheet

PAGE 1/2

BCRJ Code: 0338

Cell Line: P3HR-1

Species: Homo sapiens

Vulgar Name: Human

Tissue: Lymph

Morphology: Lymphoblast

Growth Properties: Suspension

Biosafety: 2

Additional Info:

Clonally-derived sub-line of JIYOYE containing high levels of EBV. Has been successfully hybridised with the human lymphoid cell line K562 to form the hybrid PUTKO-1. The Y chromosome could not be detected in this cell line by short tandem repeat (STR)-PCR analysis. It is a known phenomenon that due to the increased genetic instability of cancer cell lines the Y chromosome can be rearranged or lost resulting in lack of detection. The cell line is identical to the source provided by the depositor based on the STR-PCR analysis.

Culture Medium:

RPMI 1640 medium with 2 mM L-glutamine adjusted to contain 4.5 g/L glucose, 10% of heat-inactivated fetal bovine serum and 10% mouse Interleukin-3 culture supplement.

Subculturing:

Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension. Discard supernatant and resuspend cells in fresh growth medium. Add appropriate aliquots of cell suspension to new culture vessels; Maintain at at $3-9 \times 10^5$ cells/cm². Place culture vessels in incubator at 37°C. NOTE: Do not allow the cell concentration to exceed 1×10^6 cells/mL. 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.

Culture Conditions:

Atmosphere: air, 95%; carbon dioxide (CO₂), 5% Temperature: 37°C



Data Sheet

PAGE 2/2

Cryopreservation: 95% FBS + 5% DMSO (Dimethyl sulfoxide)

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 $125 \times g$ 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).

Thawing Frozen Cells:

References: J Virol 1967;1:1045; J Nat Cancer Inst 1980;64:725

Depositors: Ana Luiza Monteiro Wanzeller - Instituto Evandro Chagas

Cellosaurus: [CVCL_2676](#)