

## Data Sheet

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**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/cm<sup>2</sup>. Place culture vessels in incubator at 37°C. NOTE: Do not allow the cell concentration to exceed  $1 \times 10^6$  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 (CO<sub>2</sub>), 5% Temperature: 37°C



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

### Thawing Frozen Cells:

**SAFETY PRECAUTION:** It is highly recommended that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submerged in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris. 1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the vial and cap out of the water. Thawing should be rapid (approximately 2 minutes). 2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions. 3. For cells that are sensitive to DMSO it is recommended that the cryoprotective agent be removed immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125 x g for 5 to 7 minutes. 4. Discard the supernatant and Resuspend cell pellet with the recommended complete medium (see the specific batch information for the culture recommended dilution ratio). 5. Incubate the culture in an appropriate atmosphere and temperature (see "Culture Conditions" for this cell line). **NOTE:** It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).

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

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