

Data Sheet

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BCRJ Code:	0410
Cell Line:	TK-6
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Spleen
Cell Type:	Lymphoblast
Morphology:	Lymphoblast
Disease:	Hereditary Spherocytosis
Growth Properties:	Suspension
Sex:	Male
Age/Ethnicity:	5 Year /
Derivation:	The thymidine kinase heterozygote cell line TK6 has been isolated from the lymphoblastoid line HH4. HH4 was derived from the WIL-2 cell line. TK6 cells are CD19 positive, 50% of the cell population express CD20 and a small sub-population has been tested positive for CD22
Biosafety:	2
Additional Info:	Resistance to thioguanine (hprt locus), and resistance to ouabain (Na/K ATPase).
Culture Medium:	RPMI 1640 + 2mM Glutamine + 10% fetal bovine serum.
Subculturing:	Cultures can be maintained by addition or replacement of fresh medium. Maintain the cell concentration between 2×10^5 and 1×10^6 cells/mL.

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Subculturing Medium Renewal:

Every 2 to 3 days

Culture Conditions:

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

Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

Thawing Frozen Cells:

SAFETY PRECAUTION: Is highly recommend 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 submersed 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 Oring 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 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 a 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:

Biochem Biophys Res Commun 1978;84:411

Depositors:

Banco de Células do Rio de Janeiro

ATCC:

CRL-8015

