Data Sheet

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/Ethinicity:	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
Addtional 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 X 105 and 1 X 106 cells/mL.
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: 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 × 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).
References:	Biochem Biophys Res Commun 1978;84:411
Depositors:	Banco de Células do Rio de Janeiro

Cellosaurus: CVCL_0561