Data Sheet

BCRJ Code:	0127
Cell Line:	K-562 LUCENA
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Hematopoietic
Morphology:	Lymphoblast
Disease:	Chronic Myelogenous Leukemia
Growth Properties:	Suspension
Sex:	Female
Age/Ethinicity:	53 Year /
Derivation:	The K562-Lucena cell line was established from K562 cell line under pressure of gradual vincristine supplement in culture medium. It express the P-Glicoprotei and has a Multi Drug Resistance (MDR) phenotype.
DNA Profile:	Amelogenin: X CSF1PO: 9,10 D13S317: 8 D16S539: 11,12 D5S818: 11,12 D7S820: 9,11 THO1: 9.3 TPOX: 8,9 vWA: 16
Tumor Formation::	Yes, in nude mice Tumors developed within 21 days at 100% frequency (5/5) in nude mice inoculated subcutaneously with 107 cells.
Products:	Glicoprotein - P (MDR-1)
Biosafety:	1
Culture Medium:	RPMI-1640 medium modified to contain 2 mM L-glutamine, 4500 mg/L glucose, 60nM vincristine and 10% of fetal bovine serum.

Subculturing:	Cultures can be maintained by the addition or replacement of fresh medium. Start new cultures at 1 x 10e5 viable cells/mL. Subculture at 1 x 10e6 cells/mL. T-75 flasks are recommended for subculturing this product.
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:	Ciência e Cultura, 46:63-69, 1994 Braz.J. Med. Biol. Res, 29:401-542, 1996

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