Data Sheet

BCRJ Code:	0126
Cell Line:	K-562
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Bone Marrow
Morphology:	Lymphoblast
Disease:	Chronic Myelogenous Leukemia
Growth Properties:	Suspension
Sex:	Female
Age/Ethinicity:	53 Year /
Derivation:	The continuous cell line K-562 was established by Lozzio and Lozzio from the pleural effusion of a 53-year-old female with chronic myelogenous leukemia in terminal blast crises.
Applications:	This cell line is suitable as a transfection host. The K-562 cell line has attained widespread use as a highly sensitive in vitro target for the natural killer assay.
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.
Biosafety:	1
Culture Medium:	RPMI-1640 medium modified to contain 2 mM L-glutamine, 4500 mg/L glucose 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: 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:

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