

Data Sheet

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BCRJ Code:	0261
Cell Line:	KU812
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Peripheral Blood
Cell Type:	Basophil
Morphology:	Myeloblast
Disease:	Chronic Myelogenous Leukemia
Growth Properties:	Suspension
Sex:	Male
Age/Ethnicity:	38 Year / Japanese
Derivation:	The KU812 cell line was established from the peripheral blood of a patient in blast crisis of chronic myelogenous leukemia.
Products:	TRANSFORMING GROWTH FACTOR BETA (TGF BETA)
Biosafety:	1
Additional Info:	The cells contain at least one Ph1 (Philadelphia) chromosome. The cell line has some characteristics of basophilic leukocytes (Fc receptors, basophilic granules, histamine production), and are negative for lymphoid markers. The cell line has some characteristics of basophilic leukocytes (Fc receptors, basophilic granules, histamine production), and are negative for lymphoid markers.
Culture Medium:	RPMI-1640 medium modified to contain 2 mM L-glutamine, 4500 mg/L glucose 10% of fetal bovine serum.



Subculturing:

Cultures can be maintained by addition of fresh medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 3×10^5 viable cells/mL. NOTE: Do not allow the cell concentration to exceed 3×10^6 cells/mL. Population Doubling Time: 20 to 30 hours

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 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 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 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 $125 \times g$ 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:

44220: Kishi K. A new leukemia cell line with Philadelphia chromosome characterized as basophil precursors. *Leuk. Res.* 9: 381-390, 1985. PubMed: 3858609
44221: Okano H, et al. Hemoglobin synthesis of both adult and fetal types in a human CML cell line. *J. Biochem.* 104: 162-164, 1988. PubMed: 2460439
44222: Okamura S, et al. Expression of cytokine genes in hematological malignancies. *Nippon Ketsueki Gakkai Zasshi* 52: 1423-1432, 1989. PubMed: 2698048
61145: Blom T, et al. Phenotypic characterization of KU812, a cell line identified as an immature human basophilic leukocyte. *Eur. J. Immunol.* 22: 2025-2032, 1992. PubMed: 1639103

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ATCC:

CRL-2099