BCRJ Code:	0262
Cell Line:	MEG-01
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Bone Marrow
Cell Type:	Megakaryoblast
Morphology:	Lymphoblast
Disease:	Chronic Myelogenous Leukemia,
Growth Properties:	Mixed, Adherent And Suspension
Sex:	Male
Age/Ethinicity:	55 Year /
Derivation:	The MEG-01 cell line was derived in 1983 at the Nagoya University School of Medicine, Nagoya, Japan from bone marrow cells taken from a patient in megakaryoblastic crisis of CML.
Applications:	This cell line is a suitable transfection host.
DNA Profile:	Amelogenin: X,Y CSF1PO: 10 D13S317: 8 D16S539: 9 D5S818: 13 D7S820: 11 THO1: 7 TPOX: 8,11 vWA: 16
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:	Subcultures are prepared by scraping the adherent cells into the medium. From the resulting suspension dilute cells to a concentration 1-2 X 10e5 cells/mL into fresh medium in a new flasks. Keep culture below approximate density of 10e6 cells/mL. Subcultures are prepared by scraping the adherent cells into the medium, and diluting the resulting suspension into fresh medium in new flasks.
Subculturing Medium Renewal:	2 to 3 times per week
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:	23348: Ogura M, et al. Establishment of a novel human megakaryoblastic leukemia cell line, MEG- 01, with positive Philadelphia chromosome. Blood 66: 1384-1392, 1985. PubMed: 2998511
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