Data Sheet

BCRJ Code:	0426
Cell Line:	ARH-77
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Peripheral Blood
Cell Type:	B lymphoblast
Morphology:	Lymphoblast
Disease:	Plasma Cell Leukemia
Growth Properties:	Suspension
Sex:	Female
Age/Ethinicity:	33 Year / White
Derivation:	The ARH-77 cell line was established from the peripheral blood of a patient suffering from IgG plasma cell leukemia. Although established from cells taken from a patient with a plasma cell leukemia, this line has been shown to be an EBV-transformed B lymphoblastoid cell line.
Applications:	3D cell culture; Immune system disorder research; Immunology
DNA Profile:	Amelogenin: X CSF1PO: 6,10 D13S317: 11,13 D16S539: 9,13 D5S818: 10,13 D7S820: 7,12 TH01: 8,9.3 TPOX: 8 vWA: 17 D3S1358: 16 D21S11: 29,30 D18S51: 14,16 Penta_E: 12 Penta_D: 10 D8S1179: 14,15 FGA: 20,21 D19S433: 14,15 D2S1338: 17
Biosafety:	2

Addtional Info:	The cells are positive for Epstein-Barr nuclear antigen(EBNA +) and Epstein-Barr viral capsid antigen (EBVCA +).
Culture Medium:	RPMI-1640 medium modified to contain 2 mM L-glutamine, 4500 mg/L glucose and fetal bovine serum to a final concentration of 10%.
Subculturing:	Cultures can be maintained by addition or replacement of fresh medium. Start cultures at 2 x 105 viable cells/mL and maintain between 1 x 105 and 1 x 106 cells/mL.
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:	Burk KH, et al. Establishment of a human plasma cell line in vitro. Cancer Res. 38: 2508-2513, 1978. PubMed: 566614 Cote RJ, et al. Generation of human monoclonal antibodies reactive with cellular antigens. Proc. Natl. Acad. Sci. USA 80: 2026-2030, 1983. PubMed: 6572959 Storkus WJ, et al. Reversal of natural killing susceptibility in target cells expressing transfected class I HLA genes. Proc. Natl. Acad. Sci. USA 86: 2361-2364, 1989. PubMed: 2784569 Edwards PA, et al. A human-hybridoma system based on a fast-growing mutant of the ARH-77 plasma cell leukemia-derived line. Eur. J. Immunol. 12: 641-648, 1982. PubMed: 7140810 Pellat-Deceunynk C, et al. Human myeloma cell lines as a tool for studying the biology of multiple myeloma: a reappraisal 18 years after. Blood 86: 4001-4002, 1995. PubMed: 7579375
Depositors:	EDGAR JULIAN PAREDES GAMERO
ATCC:	CRL-1621