

Code:	0181
Cell Line:	NAMALWA
Species:	Homo sapiens Vulgar Name: Human
Tissue:	Blood
Morphology:	Lymphoblast
Disease:	Burkitt'S Lymphoma
Growth Properties:	Suspension
Sex:	Female
Age Ethnicity:	3 year
Applications:	This cell line is a suitable transfection host.
DNA Profile:	Amelogenin: X CSF1PO: 10,11 D13S317: 11,12 D16S539: 9 D5S818: 12,13 D7S820: 11 THO1: 7,9.3 TPOX: 6,11 vWA: 14
Products:	immunoglobulin
Biosafety:	2
Additional info:	Secretes small amounts of an IgM monoclonal antibody of unknown specificity. It has been used for commercial production of human interferon. The cells contain the Epstein-Barr virus (EBV) genome.
Culture Medium:	RPMI-1640 medium modified to contain 2 mM L-glutamine, 10 mM HEPES, 1 mM sodium pyruvate, 4500 mg/L glucose, and 1500 mg/L sodium bicarbonate and 10% of fetal bovine serum.

Subculturing: Cultures can be maintained by addition or replacement of fresh medium. Cultures should be started at 5×10^5 viable cells/mL and subcultured at 2×10^6 cells/mL.

Medium Renewal: Add fresh medium (20% to 30% by volume) every 2 to 3 days

Subcultivation ratio:

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:

Klein F, et al. Large-scale production and concentration of human lymphoid interferon. *Antimicrob. Agents Chemother.* 15: 420-427, 1979. PubMed: 464569
Benjamin D, et al. Immunoglobulin secretion by cell lines derived from African and American undifferentiated lymphomas of Burkitt's and non-Burkitt's type. *J. Immunol.* 129: 1336-1342, 1982. PubMed: 6286763
Klein G, et al. Sensitivity of Epstein-Barr virus (EBV) producer and non-producer human lymphoblastoid cell lines to superinfection with EB-virus. *Int. J. Cancer* 10: 44-57, 1972. PubMed: 4122458
Nyormoi O, et al. Sensitivity to EBV superinfection and IUdR inducibility of hybrid cells formed between a sensitive and a relatively resistant Burkitt lymphoma cell line. *Int. J. Cancer* 12: 396-408, 1973. PubMed: 4365093

Depositors:

Universitú De Marseille, Marseille, France.

ATCC:

CRL-1432