



#### **General information**

Description

Established 1973 from a 5-year-old African girl with a (EBV-negative) Burkitt?s Lymphoma. The cell line was reported to be EBV-negative

Organism

Human

**Disease** Burkitt lymphoma

Blood

**Applications** Analysis of B cell surface antigens, testing of cytotoxic drugs, mutational analysis, analysis of apoptotic

mechanisms, HLA-typing

**Synonyms** BJAb, BJA-B, BJAB-1, BJA-B1, BJA-B-1

### **Characteristics**

**Tissue** 

Age 5 years

**Gender** Female

**Ethnicity** African

Morphology Round cells

**Cell type** B lymphoblast

**Growth** Suspension **properties** 

### **Identifiers / Biosafety / Citation**

Citation BJAB (Cytion catalog number 302006)

Biosafety level

# **Expression / Mutation**

**Antigen** CD10+, CD19+, CD20+, CD21(+), CD22+, CD23-, CD24-, CD37+, CD37+, CD38+, CD39-, CD40+, CD54+, CD72+, CD73-, expression CD75+, CD77+, CD81, CD82+, CD83+, CD84+, CD86+



# **BJAB Cells | 302006**

Karyotype	46, hypodiploid
Handling	
Culture Medium	RPMI 1640, w: 4.5 g/L Glucose, w: 2 mM L-Glutamine, w: 10 mM HEPES, w: 1 mM Sodium pyruvate, w: 1.5 g/L NaHCO3 (Cytion article number 820702a)
Medium supplements	Supplement the medium with 20% FBS
Subculturing	Maintain cultures by periodically adding or replacing the medium. Initiate cultures with a density of $2 \times 10^5$ cells/ml and keep the cell concentration within the range of $1 \times 10^5$ to $1 \times 10^6$ cells/ml for optimal growth.
Seeding density	3 x 10^5 cells/ml
Fluid renewal	Every 3 to 5 days
Freezing recovery	Allow the cells to recover from the freezing process for at least 48 hours.
Freeze medium	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)





#### Handling of cryopreserved cultures

- 1. Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
- 2. Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
- 3. For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
- 4. Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
- 5. Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
- 6. Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium. Optionally, skip centrifugation but remove any remaining freezing medium after 24 hours.
- 7. Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
- 8. Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

# Quality control / Genetic profile / HLA

#### Sterility

Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods.

To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.



# **BJAB Cells | 302006**

STR profile Amelogenin: x,x

CSF1PO: 8, 10
D13S317: 9,11
D16S539: 9, 12
D5S818: 12, 13
D7S820: 10, 11
THO1: 7
TPOX: 6, 9
vWA: 14, 15
D3S1358: 16
D21S11: 27, 28
D18S51: 16, 22
Penta E: 7
Penta D: 10, 11
D8S1179: 14, 18
FGA: 27, 28

**HLA alleles A\***: 01:01:83, 02:01:01

B\*: 13:02:01, 35:01:01 C\*: 04:01:01, 06:02:01 DRB1\*: 12:01:01, 13:02:01 DQA1\*: 01:02:01, 05:05:01 DQB1\*: 03:01, 06:04:01 DPB1\*: 04:02:01G E: 01:01, 01:03