

Cell Culture Protocol for Raji cells

Raji (ATCC number CCL-86): Burkitt's Lymphoma; B lymphocyte cell line
Growth medium: RPMI Medium 1640 (GIBCO # 21870) + 10% FBS + 2mM L-Glutamine + 100 units/ml penicillin + 100 micro-g/ml streptomycin (GIBCO # 15140-122).

Protocol for Thawing Raji Cells:

1. Take out the Raji stock vial from liquid nitrogen (we freeze at 1×10^6 cells per vial) and thaw it in 37° water bath. Suspend thawed cells in 5 ml growth media.
2. Centrifuge at 1000 rpm for 3 min, discard media.
3. Resuspend cell pellet in 15ml growth media and transfer cells into a 75 sq. cm. tissue culture flask. Cells are grown in a 37°C incubator at 5% CO_2 .

Protocol for Subculturing of Raji Cells:

Change medium every 2 to 3 days, and split cultures when they reach $2\text{-}3 \times 10^6$ viable cells/ml.

1. Transfer cell suspension (in growth medium) to centrifuge tubes and spin at 1000rpm for 3minutes.
2. Aspirate supernatant and add 10mls of fresh growth media
3. Count cells, and transfer $0.5\text{-}5 \times 10^5$ viable cells/ml to a new culture vessel (this can either be a spinner flask or a tissue culture flask that's placed horizontally a 37°C incubator at 5% CO_2 .)

Note: We typically split cells at a ratio of 1:10 every 2 to 3 days using the abovementioned seeding conditions (and we grow a back-up maintenance plate, in addition to the culturing vessel used for experiments, by adding about 1×10^5 cells per 75 sq. cm flask).

Freezing of Raji Cells:

Cells can be stored as a stock in liquid nitrogen at 1×10^6 cells/ml in growth medium containing 10% DMSO.