

EGG Cells | 400171

General information

Description

EGG is a murine leukemia cell line derived from an adult mouse of the DBA strain (*Mus musculus*). It is classified as a cancer cell line and is associated with mouse leukemia. The line originates from hematopoietic malignant cells and displays characteristics consistent with murine lymphoid leukemia models, including suspension growth and rapid proliferative capacity under standard culture conditions. The sex of the originating animal is unspecified.

As a DBA-derived leukemia model, EGG cells are suitable for in vitro studies of murine hematologic malignancy biology, including investigations into leukemic cell proliferation, differentiation status, apoptosis regulation, and responses to cytotoxic or targeted therapeutic agents. Because the DBA background is immunogenetically distinct from other common laboratory strains (such as C57BL/6 or BALB/c), EGG may be particularly relevant in studies examining strain-specific tumor biology, host-tumor interactions, and transplantation compatibility in syngeneic or allogeneic mouse systems.

Organism Mouse

Tissue Blood

Disease Leukemia

Characteristics

Breed/Subspecies DBA

Age Adult

Gender Unspecified

Morphology Lymphocytic

Growth properties Suspension

Regulatory Data

Citation EGG (Cytion catalog number 400171)

Biosafety level 1

NCBI_TaxID 10090

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CellosaurusAccession CVCL_5739

Biomolecular Data**Tumorigenic** Yes, in DBA mice**Viruses** MAP-test negative: Sendai, Ektromelie, Polyoma, K-Virus, Kilham, Reo 3, PVM, LCM, M.pulmonis, MVM, Theiler's GD VII, Toolan's H-1, MHV, LDV, RCV/SDA, M-Adenovirus, B.piliformis.**Handling****Culture Medium** RPMI 1640, w: 2.0 mM stable Glutamine, w: 2.0 g/L NaHCO₃ (Cytion article number 820700a)**Supplements** Supplement the medium with 10% FBS**Subculturing** Maintain cultures by periodically adding or replacing the medium. Initiate cultures with a density of 5×10^5 cells/ml and keep the cell concentration within the range of 3×10^5 to 1×10^6 cells/ml for optimal growth.**Seeding density** 0.1×10^6 cells/ml**Fluid renewal** Every 3 to 5 days**Post-Thaw Recovery** After thawing, allow the cells to recover from the freezing process for at least 24 hours**Freeze medium** As a cryopreservation medium, we use complete growth medium (including FBS) + 10% DMSO for adequate post-thaw viability, or CM-1 (Cytion catalog number 800100), which includes optimized osmoprotectants and metabolic stabilizers to enhance recovery and reduce cryo-induced stress.

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Thawing and Culturing Cells

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 $300 \times g$ for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium.
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.

Incubation Atmosphere

37°C , 5% CO_2 , humidified atmosphere.

Shipping Conditions

Cryopreserved cell lines are shipped on dry ice in validated, insulated packaging with sufficient refrigerant to maintain approximately -78°C throughout transit. On receipt, inspect the container immediately and transfer vials without delay to appropriate storage.

Storage Conditions

For long-term preservation, place vials in vapor-phase liquid nitrogen at about -150 to -196°C . Storage at -80°C is acceptable only as a short interim step before transfer to liquid nitrogen.

Quality Control & Molecular Analysis

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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.