

REH Cells | 300320

General information

Description	According to our STR-Analysis and comparison with various databanks, the DNA results are ambiguous.
Organism	Human
Tissue	Peripheral blood
Disease	Acute lymphoblastic leukemia (ALL)
Synonyms	Reh

Characteristics

Age	15 years
Gender	Female
Ethnicity	Caucasian
Morphology	Round cells
Cell type	Lymphoblast
Growth properties	Suspension

Identifiers / Biosafety / Citation

Citation	REH (Cytion catalog number 300320)
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Biosafety level 1

Expression / Mutation

Antigen expression	CD3 A (17%) B (17%) C (20%), CD4 (15%), CD10 (55%), CD20+, HLA-DR+, CALLA+
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Handling

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Culture Medium RPMI 1640, w: 2.1 mM stable Glutamine, w: 2.0 g/L NaHCO₃ (Cytion article number 820700a)

Medium supplements Supplement the medium with 10% FBS

Subculturing Maintain cultures by periodically adding or replacing the medium. Initiate cultures with a density of 2×10^5 cells/ml and keep the cell concentration within the range of 1×10^5 to 1×10^6 cells/ml for optimal growth.

Split ratio A ratio of 1:2 to 1:4 is recommended

Fluid renewal 2 to 3 times per week

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 $300 \times g$ 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.

STR profile

CSF1PO: 12,13

D13S317: 11,12,13

D16S539: 9,10,13

D5S818: 11,12,13

D7S820: 9,11

TH01: 7

TPOX: 8

vWA: 14,15

D3S1358: 18

D21S11: 18

D18S51: 10,13,14

Penta E: 10,11

Penta D: 9,10,12

D8S1179: 13,16

FGA: 22,23,24

HLA alleles

A*: 23:01:01, 32:01:01

B*: 35:02:01, 50:01:01

C*: 04:01:01, 06:02:01

DRB1*: 11:01:01, 12:01:01

DQA1*: 05:05:01

DQB1*: 03:01:01

DPB1*: 04:01:01G, 04:02:01G

E: 01:01:01, 01:03:05