OCI-LY7

305611

VŠEOBECNÉ INFORMÁCIE

Popis

OCI-LY7 is a human diffuse large B-cell lymphoma (DLBCL) cell line derived from the malignant lymph node of a patient with DLBCL. This cell line is classified as a germinal center B-cell-like (GCB) subtype of DLBCL, which is characterized by genetic and molecular features associated with lymphomas originating from germinal center B cells. OCI-LY7 serves as a valuable model for studying the biology of DLBCL, including germinal center differentiation, oncogenic signaling pathways, and therapeutic vulnerabilities specific to the GCB subtype.
OCI-LY7 cells grow in suspension and exhibit a lymphoblast-like morphology. They express surface markers consistent with germinal center B cells and are notable for carrying genetic alterations frequently found in GCB-DLBCL, including dysregulations of the BCL-6 transcriptional repressor and components of the PI3K/AKT/mTOR signaling pathway. These features make OCI-LY7 an important tool for exploring the molecular mechanisms underlying GCB-DLBCL pathogenesis, as well as the role of oncogenic mutations in promoting cell survival, proliferation, and resistance to apoptosis.
The cell line is also used to investigate mechanisms of drug resistance and to develop combination treatment strategies tailored to the GCB subtype. As a well-characterized model of GCB-DLBCL, OCI-LY7 remains a critical resource for advancing the understanding of this lymphoma subtype and for identifying therapeutic approaches that improve outcomes for patients with DLBCL.

Tkanivo	Peripheral blood
Choroba	B cell lymphoma

Synonymá

- OCI-LY7
- OCI-LY-7
- OCI-Ly-7
- Oci-Ly-7
- OCI-Ly 7
- OCI-Ly07
- OCILY7
- Ly7
- LY7

KLASIFIKÁCIA

Organizmus	Človek
Sex	Muž
Rastové vlastnosti	Zavesenie
Úroveň biologickej bezpečnosti	1

CHARAKTERISTIKY

Morfológia	Round to polymorph cells growing in clusters
Typ bunky	Epithelial cell
Doba zdvojnásobenia	20-24 hours

IDENTIFIKÁTORY

Citácia

OCI-LY7 (Cytion catalog number 305611)

Daňové identifikačné číslo NCBI	9606
Cellosaurus	CVCL_1881

PREJAV A NÁCHYLNOSŤ

Expresia antigénu

CD3 -, CD10 +, CD13 -, CD19 +, CD20 +, CD34 -, CD37 +, CD38 +, cyCD79a +, CD80 -, CD138 -, HLA-DR +, sm/cyIgG -, sm/cyIgM +, sm/cykappa +, sm/cylambda -

Mutčný profil

Gene Fusion: IGH + HGNC, 7553, MYC, MYC-IGH

Vírusy

EBV -, HBV -, HCV -, HIV-1 -, HIV-2 -, HTLV-I/-II -, MLV -

MANIPULÁCIA A KULTIVÁCIA

Kultivačné médium

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

Inkubačná atmosféra	37°C, 5% CO_2, humidified atmosphere.

Doplnky stravy

Supplement the medium with 10% FBS

Hustota výsevu	3-5*10^5/ml
Obnova kvapaliny	2 to 3 times per week

Rozmrazovanie a kultivácia

Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
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.
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.
Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
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.
Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium.
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.
Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

KONTROLA KVALITY A KRYOKONZERVÁCIA

Sterilita

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.

Mrazové médium	As a cryopreservation medium, we recommend CM-1 (Cytion catalog number 800100), which includes optimized osmoprotectants and metabolic stabilizers to enhance recovery and reduce cryo-induced stress.

Podmienky skladovania

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.

Dopravné podmienky

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.

DARCA

Vek darcu	48 years
Etnická príslušnosť	Caucasian

PRÁVNE INFORMÁCIE A BEZPEČNOSŤ

Bezpečnostné opatrenia

When planning to store a cryovial in liquid nitrogen for future thawing, it is mandatory to adhere to stringent safety measures. Appropriate protective gloves and clothing are essential, and the use of a face mask or safety goggles is required during the transfer of frozen samples to or from the liquid nitrogen tank. This is to mitigate the risk of injury from potential cryovial explosions upon removal, which can result in the projection of sharp fragments.

Záruka

At Cytion, we stand behind the quality and viability of our products.
We guarantee that our cells will be viable at the start of culture for
60 days after shipment from our facilities.
We assure that all materials conform to the specifications described in the
Certificate of Analysis and/or Product Sheet.
For full details, please refer to our
Warranty Statement.

Je potrebná dohoda o prenose materiálu	Yes

PODROBNOSTI O PRODUKTE

Tabuľka zloženia