Product sheet

SU-DHL-8 Cells | 305877

General information

Description	SU-DHL-8 is a human diffuse large B-cell lymphoma (DLBCL) cell line derived from an adult patient. It represents the activated B-cell-like (ABC) subtype of DLBCL, which is characterized by constitutive activation of the NF-κB signaling pathway and typically exhibits poorer prognosis compared to the germinal center B-cell-like (GCB) subtype. Morphologically, the SU-DHL-8 cells grow as large, loosely adherent aggregates in suspension, consistent with B-cell lymphoma phenotypes. Molecular characterization reveals that SU-DHL-8 harbors mutations commonly associated with ABC-DLBCL, including alterations affecting the BCR and NF-κB signaling pathways. Genomic profiling through next-generation sequencing and expression analysis has identified elevated activity in pathways such as JAK/STAT and BCL2-associated anti-apoptotic signaling. The cell line is also part of several large-scale pharmacogenomic studies and cancer model repositories, where it has been used to explore drug sensitivities, particularly to kinase inhibitors and proteasome-targeting agents. These features make SU-DHL-8 a representative and valuable model for investigating the molecular pathogenesis and therapeutic vulnerabilities of ABC-type DLBCL.
Organism	Human
Tissue	Pleural effusion
Disease	Diffuse large B-cell lymphoma germinal center B-cell type
Synonyms	SUDHL8, SUDHL-8, SuDHL 8, Stanford University-Diffuse Histiocytic Lymphoma-8, DHL-8, DHL8

Characteristics

Age	59 years
Gender	Male
Ethnicity	Caucasian
Morphology	Lymphoblast-like
Cell type	B lymphocyte
Growth properties	Suspension, single cells and small clusters

Regulatory Data

Citation	SU-DHL-8 (Cytion catalog number 305877)

SU-DHL-8 Cells | 305877

Biosafety level	1
NCBI_TaxID	9606
CellosaurusAccession	CVCL_2207

Biomolecular Data

Antigen expression	Ig+; IgM-, IgG-, IgA-, IgD-, Lambda-, Kappa-
Mutational profile	Mutation: KMT2D, Simple, p.Pro648Thrfs*2 (c.1940dupC) (c.1940_1941insC), Heterozygous (Cosmic-CLP=1331038), TP53, Simple, p.Tyr234Asn (c.700T>A), Heterozygous (Cosmic-CLP=1331038), TP53, Simple, p.Arg249Gly (c.745A>G), Heterozygous (Cosmic-CLP=1331038)

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
Dissociation Reagent	none
Doubling time	~48-72 hours
Seeding density	0.3-0.5 x 10^6 cells/ml
Fluid renewal	2 to 3 times per week
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.

SU-DHL-8 Cells | 305877

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 x 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

SU-DHL-8 Cells | 305877

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.