Product sheet

WT51 Cells | 302141

General information

Description	EBV-transformed B-lymphoblastoid cell line, derived from a male person, age unspecified. Homozygous cell line for HLA A:9, ,B:14, DR:4, and DP:2. Consanguineous parents. WT51 was part of the 10th International Histocompatibility Workshop (10IHW) cell line panel. Submitted by Dr.M.Trucco, HLA-Laboratory, Pittsburgh University Cancer Institute, USA.
Organism	Human
Tissue	Peripheral blood
Applications	Functional analysis and genotyping of HLA Class II molecules. Analysis of B cell surface antigens, testing of cytotoxic drugs, mutational analysis, analysis of apoptotic mechanisms
Synonyms	WT-51, WT 51, GM03103, GM3103, GM03103A

Characteristics

Age	Unspecified
Gender	Male
Ethnicity	Caucasian
Morphology	Round cells
Cell type	B lymphoblast
Growth properties	Suspension

Identifiers / Biosafety / Citation

Citation	WT51 (Cytion catalog number 302141)
Biosafety level	1

Expression / Mutation

Antigen expression	CD19+

Viruses	Free of human pathogenic viruses SV40, JC/BK, HBV, HCV, and HIV. Contains EBV.
Karyotype	46, x,Y

Handling

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	Gently homogenize the cell suspension in the flask by pipetting up and down, then take a representative sample to determine the cell density per ml. Dilute the suspension to achieve a cell concentration of 1 x 10^5 cells/ml with fresh culture medium, and aliquot the adjusted suspension into new flasks for further cultivation.
Split ratio	Inoculate the fresh medium with 5x10^5 cells/ml
Fluid renewal	1 to 2 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 x 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.

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STR profile	**CSF1PO**: 10 **D13S317**: 8,12 **D16S539**: 11,12 **D5S818**: 11,13 **D7S820**: 8,11 **TH01**: 8,9.3 **TPOX**: 8,11 **vWA**: 17,19 **D3S1358**: 15 **D21S11**: 30.2,32.2 **D18S51**: 12,14 **Penta E**: 7,13 **Penta D**: 13 **D8S1179**: 11,12 **FGA**: 24,25
HLA alleles	**A***: 23:01:01:01 **B***: 14:01:01 **C***: 08:02:01:02 **DRB1***: 04:01:01 **DRB4***: 01:01 **DQA1***: 03:01 **DQB1***: 03:02:01 **DPA1***: 01:03 **DPB1***: 02:01:02, 02:01:19