Product sheet

RPMI 1788 Cells | 300318

General information

Description	The RPMI 1788 cell line was derived from the peripheral blood of an apparently normal patient. The cells are EBNA positive.
Organism	Human
Tissue	Peripheral blood
Synonyms	RPMI-1788, RPMI1788, Roswell Park Memorial Institute 1788, GM02131, GM2131, GM02131A, GM17219

Characteristics

Age	33 years
Gender	Male
Ethnicity	Caucasian
Morphology	Round cells
Cell type	B lymphoblast
Growth properties	Suspension

Regulatory Data

Citation	RPMI 1788 (Cytion catalog number 300318)
Biosafety level	2
NCBI_TaxID	9606
CellosaurusAccession	CVCL_2710

Biomolecular Data

Antigen expression	HLA A2, Aw33, B7, B14

RPMI 1788 Cells | 300318

Isoenzymes	G6PD, B
Viruses	EBNA-pos
Reverse transcriptase	Negative
Products	IgM (lambda light chain), lymphotoxin (LT) also known as tumor necrosis factor beta (TNF-beta, TNF beta)
Karyotype	Human male, hypodiploid, stable

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 x 10^5 cells/ml and keep the cell concentration within the range of 3 x 10^5 to 1 x 10^6 cells/ml for optimal growth.
Seeding density	1 x 10^5 cells/mL
Post-Thaw Recovery	Low viability after thawing. Good recovery after 8 days
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.

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

RPMI 1788 Cells | 300318

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.