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

Identifiers / Biosafety / Citation

Citation	RPMI 1788 (Cytion catalog number 300318)
Biosafety level	2

Expression / Mutation

Antigen expression	HLA A2, Aw33, B7, B14
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: 2.1 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 x 10^5 cells/ml and keep the cell concentration within the range of 1 x 10^5 to 1 x 10^6 cells/ml for optimal growth.
Split ratio	A ratio of 1:2 to 1:4 is recommended
Seeding density	1 x 10^5 cells/mL
Freezing recovery	Low viability after thawing. Good recovery after 8 days
Freeze medium	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)
Handling of cryopreserved cultures	RPMI 1788 cells are shipped in a deep-frozen state on dry ice. Upon receipt, confirm that the vial remains frozen. For storage, place the cryovial immediately at temperatures below -150 degrees. If you plan to culture the cells immediately, swiftly thaw the vial by shaking it in a 37 degrees water bath with clean water and an antimicrobial agent for 40-60 seconds. Remove the vial once a small ice clump persists, ensuring it remains cold. Proceed with all subsequent steps under aseptic conditions. In a sterile flow hood, disinfect the cryovial with 70% ethanol. Then, gently open the vial and transfer the cell suspension into a 15 ml centrifuge tube pre-filled with 8 ml of room temperature culture medium. Gently mix the cells. For cell separation, centrifuge at 300 x g for 3 minutes and dispose of the supernatant. Skipping centrifugation is optional, although any residual freezing medium should be removed after 24 hours. Resuspend the pellet gently in 10 ml of fresh culture medium and divide between two T25 culture flasks. Follow the subculture protocol for subsequent steps.

Quality control / Genetic profile / HLA

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Sterility	Mycoplasma contamination is rigorously 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	**Amelogenin**: x,y **CSF1PO**: 10 **D13S317**: 11,13 **D16S539**: 10,13 **D5S818**: 12,13 **D7S820**: 10,12 **TH01**: 6,9.3 **TPOX**: 8,9 **vWA**: 18,19 **D3S1358**: 13,16 **D21S11**: 31,32.2 **D18S51**: 15,17 **Penta E**: 7,11 **Penta D**: 12,13 **D8S1179**: 13,14 **FGA**: 20,23
HLA alleles	**A***: 02:01:01, 09:01:01 **B***: 07:06:01, 14:01:01 **C***: 08:02:01, 15:05:02 **DRB1***: 04:05:01, 07:01:01 **DQA1***: 02:01:01, 03:03:01 **DQB1***: 02:02:01, 03:02:01 **DPB1***: 03:01:01G, 21:01 **E**: 01:01, 01:03