Certificate of Analysis

Ensuring Integrity in Every Cell Line

Product	NCI-H1581	**Passage Number**	2
Human	Human	**Cell count per mL**	2.0 million
Cytion™ Number	305598	**Volume per ampule**	1.5
Lot Number	0796020841	**Freeze Date**	21.09.2026
Product Format	cryovial	**Freeze medium**	Freeze medium containing FBS
Storage Conditions	Below -150°C	**Expiration Date**	Not applicable
Identity match	100%		

At Cytion, we ensure the quality and reliability of our cell lines through in-house and third-party testing, including:

1. STR Profiling: To authenticate cell line identity.
2. Virus Testing: For species-specific viruses where possible.
3. Mycoplasma Testing: To prevent contamination.
4. Interspecies Contamination Testing: To ensure purity.
5. Bacteria and Fungi Testing: To ensure cells are free from microbial contaminants.

TEST OVERVIEW

Test	Methodology	Acceptance Criteria	Outcome
Post-Freeze Viability	Viability assessment using Vi-CELL BLU by Beckman Coulter (analyzing 100 images per sample, 200 µl cell suspension per test)	> 70% post-thaw cell viability	85.4%
Recovery	Culture in the appropriate growth medium, microscopic evaluation	> 80% confluence within the expected recovery period	A T25 culture flask containing 2.5 x 10^6 viable cells typically reaches a total cell count of approximately 23.2 x 10^6 viable cells within 14 days.
Growth Properties	Observation of cell culture behaviour to determine if cells are adherent, suspension, or semi-adherent	Cells exhibit expected growth properties consistent with the cell line's characteristics	Adherent
Sterility Testing	Direct inoculation on 8 media, 10-day incubation; microbial ID by MALDI-TOF MS – anaerobic culture	No aerobic microbial growth (anaerobic if test was performed)	Sterility confirmed
Mycoplasma Testing	PCR-based detection assay with specific primers targeting Mycoplasma DNA	No detectable Mycoplasma contamination confirmed by PCR	Pass

AUTHENTICATION — INTERSPECIES CONTAMINATION TESTING

Species	Status
Mouse	-
Rat	-
Human	+
Chinese hamster	-
African green monkey	-

AUTHENTICATION — STR PROFILING

Marker	Alleles
AMEL	X, Y
CSF1PO	12
D13S317	11
D16S539	9
D18S51	15
D21S11	29, 31
D3S1358	14
D5S818	12
D7S820	9, 11
D8S1179	10, 14
FGA	22
Penta_D	13
Penta_E	12, 17
TH01	6, 7
TPOX	8, 9
vWA	16
Identity match	100%

SPECIES-SPECIFIC PATHOGEN TESTING

Pathogen	Result
Hepatitis A	-
Hepatitis B	-
Hepatitis C	-
HIV1	-
HIV2	-
HTLV 1	-
HTLV 2	-
Mycoplasma sp.	-
Bacterial growth	-
Fungal growth	-

Third-Party Certified Quality Assurance

Since 2023, IDEXX has conducted STR profiling, species-specific pathogen testing, and species contamination analysis to ensure the authenticity, purity, and safety of our cell lines.

The information provided is believed to be accurate, but both the information and product are offered without warranty for any applications beyond those specified. This certificate confirms that the material has been tested and is pure to the best of our knowledge.

This product is intended solely for laboratory research use and is not for use in humans, animals, or diagnostics. Proper Biosafety Level practices are required.

Cytion products may not be resold, modified for resale, or used commercially without prior written consent from Cytion.

Manufactured in Germany under our ISO 9001:2015 certified Quality Management System, ensuring high standards of quality and reliability.

Qualified personnel have validated the test results of this Certificate of Analysis and attest with their signature that the tests were conducted as reflected in the results presented here.

F.Münster 22.10.2026

Authorised signature & date

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