Certificate of Analysis

Ensuring Integrity in Every Cell Line

Product	HBZY-1	**Passage Number**	2
Species	Rat	**Cell Count per mL**	2.0 million
Cytion™ Number	305206	**Volume per ampule**	1.5
Lot Number	305206-290724	**Freeze Date**	29.07.2024
Product Format	cryovial	**Freeze Medium**	Freeze medium containing FBS
Storage Conditions	Below -150°C	**Expiration Date**	Not applicable

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[1] identity
2. **Virus Testing:** For species-specific[2] 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.

1: Human, Mouse, Rat, Hamster and Canine Species.
2: Human, Mouse, Rat, Hamster, Bovine, and Porcine Species.

Test Overview	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	97.9%
Recovery	Culture in the appropriate growth medium, microscopic evaluation	> 80% confluence within the expected recovery period	A T25 culture flask seeded at a density of 4.4 x 10^4 viable cells per cm^2 typically reaches approximately 100% confluence within 5 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	Visual inspection	Absence of microbial growth (bacterial, fungal, or yeast)	Pass
Mycoplasma Testing	PCR-based detection assay with specific primers targeting Mycoplasma DNA	No detectable Mycoplasma contamination confirmed by PCR	Pass

Document ID: 5B26D13F6ED16F84184AEA50526AA26E

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

	Marker	Alleles
Authentication	1	104
	13	121, 135
	15	231, 242
	16	241, 243, 258, 260
	19	174, 178
	2	127
	24	259
	26	152, 154
	3	160, 162
	30	186, 192
	34	182, 189
	35	202
	36	222
	4	238
	42	146
	55	209, 216, 218
	59	145, 147, 178, 180
	61	110, 128
	62	166, 176
	67	165
	69	138
	70	175
	73	213

Document ID: 5B26D13F6ED16F84184AEA50526AA26E

Certificate of Analysis

Ensuring Integrity in Every Cell Line

	Marker	Alleles
Authentication	75	144, 184
	78	144, 151
	79	171, 179
	8	236, 238
	81	129
	90	161, 172, 174
	91	198, 221
	96	210, 212
	Identity match	Unique profile

	Pathogen	Result
Species-Specific Pathogen Testing	LCMV	-
	Mycoplasma pulmonis	-
	KRV	-
	RMV	-
	RPV	-
	H1	-
	PVM	-
	rCMV	-
	RCV/SDAV	-
	Sendai	-

Document ID: 5B26D13F6ED16F84184AEA50526AA26E

Certificate of Analysis

Ensuring Integrity in Every Cell Line

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.

IDEXX BioAnalytics

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.

Dr. R. Steubing

ID: 919EBE3E-BEC8-469F-AE97-5A3EC13C0C6C
Reason: Überprüft von <r.steubing@cytion.com>
April 08, 2025 03:35 PM CEST

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

Document ID: 5B26D13F6ED16F84184AEA50526AA26E