

Product Testing

Tikkurila Oyj Heidehofintie 2 01300 VANTAA FINLAND Eurofins Product Testing A/S Smedeskovvej 38 8464 Galten Denmark

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TEST REPORT

3 February 2022

Sample Information

Sample name Sample reception Sample no. Analysis period Argentum Plus 20 16/03/2021 392-2021-00132601 17/03/2021 - 13/04/2021

Results

Please see enclosure with detailed results for the following tests on the supplied product:

- 1. Determination of antibacterial activity:
 - ISO 22196 Measurement of antibacterial activity on plastics and other non-porous surfaces.
- 2. Determination of antiviral activity:
 - ISO 21702:2019 Measurement of antiviral activity on plastics and other non-porous surfaces.
 - EN 14476:2013+A2:2019 Chemical disinfectants and antiseptics Quantitative suspension test for the evaluation of virucidal acitivity in the medical area – Test method and requirements (phase 2/Step 1)
- 3. Expert Statement for use of BCoV as coronavirus model

Eurofins Product Testing A/S

Jeanette K. Pedersen Analytical Service Manager

Version History

Report date	Report number	Modification
		Current version
03/02/2022	392-2021-00132601_FP_EN_Rev2	Product name updated from "Argentum+ 20" to "Argentum Plus 20"
20/01/2022	392-2021-00132601_FP_EN_Rev1	Product name updated from "Paint 20" to "Argentum+ 20". Expert Statement added. This version is no longer valid.
04/05/2021	392-2021-00132601_FP_EN	This version is no longer valid.

The results are only valid for the tested sample(s).

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Vimodrone, January 19th 2022

To Tikkurila Oyj Kuninkaalantie 1 FI-010301 Vantaa Finland

Object: expert statement about the use of *Bovine coronavirus* strain S379 Riems as surrogate virus for SARS-CoV-2 pandemic virus in study STULV21AA1526-1 on Sponsor's product performed in Eurofins Biolab Srl test facility according to protocol ISO 21702:2019 (Measurement of antiviral activity on plastics and other non-porous surfaces).

The virus inactivating properties of a paint product were tested and the results described in the test report STULV21AA1526-1. The antiviral efficacy of the paint was tested using Bovine Coronavirus strain S379 Riems (BCoV) as a test virus, a coronavirus widely used in virucidal tests (ref. 1). BCoV was used as a surrogate virus of SARS-CoV-2 – the human coronavirus causing COVID-19 disease – as the latter one is highly infectious to humans and needs a BSL-3 high containment facility in order to reduce the risk of infection for test laboratory scientists. Bovine Coronavirus infects cattle and is not infectious to humans; moreover, it is similar to SARS coronaviruses in structure and genetics as it belongs to the same Betacoronavirus genus. As the product showed virus inactivating properties against bovine coronavirus, it can be assumed that it also has the same level of activity against a similar human coronavirus.

Ref. 1

The Journal of Infectious Diseases® 2017;215:902–6. Virucidal Activity of World Health Organization– Recommended Formulations Against Enveloped Viruses, Including Zika, Ebola, and Emerging Coronaviruses. Anindya Siddharta, Stephanie Pfaender, Nathalie Jane Vielle, Ronald Dijkman, Martina Friesland, Britta Becker, Jaewon Yang, Michael Engelmann, Daniel Todt, Marc P. Windisch, Florian H. Brill, Joerg Steinmann, Jochen Steinmann, Stephan Becker, Marco P. Alves, Thomas Pietschmann, Markus Eickmann, Volker Thiel and Eike Steinmann,

Michele Cavaller Biomed & P Pracetty Manager

Sincerely,

Michele Cavalleri SME and GLP/ISO17025 test facility manager Eurofins Biolab Srl

MCust.



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Sponsor		Tikkurila Oyj Kuninkaalantie 1 FI-010301 Vantaa Finland						
STUDY MONITOR		Eurofins Product Testing Denmark A/S Smedeskovvej 38 8464 Galten DENMARK						
TEST METHOD		ISO 22196 - Measurem surfaces	nent	of antibacterial activity on pla	astics and other non-porous			
TEST ITEM								
MATRIX OF THE PRODUCT		Biocide and Antimicrobia	als.					
PRODUCT NAME		PAINT 20						
Ватсн		21LLI01						
Code		FIVARKR21LLI01_SG42	20 R	01, version 2				
MANUFACTURING DATE		9/3/21		EXPIRY DATE	9/3/23			
COMPOSITION	Glass, oxide, silver phosphate (CAS 308069-39-8) 0,30 w-%, Sodium pyrithione (OMPOSITION 0,021 w-%, CAS 3811-73-2). IPBC 0,05 w-% (CAS 55406-53-6), BIT 0,027 w-% (2634-33-5). ZnO (CAS 1314-13-2) 0.023 w-% 2634-33-5).							
MATERIAL ITEM ALIQUOT		LV-MAT-FOV7-078-0H2	23:a					
TEST REFERENCE (UNTREATE	D)							
PRODUCT NAME	BLANK							
MATERIAL ITEM ALIQUOT		LV-MAT-FOV7-078-0H2	√-MAT-FOV7-078-0H24:a					
PARCEL REGISTRATION N.		IP-LV-2021077-AHV	F	RECEIVING DATE	18-Mar-2021			
ANALYSIS STARTING DATE		23-Mar-2021	1	ANALYSIS ENDING DATE	29-Mar-2021			
EXPERIMENTAL CONDITIONS								
TEST STRAINS	Staphyl Escheri	ococcus aureus chia coli	ļ	ATCC 6538P ATCC 8739				
CONTACT TIME	24 hour	S	IN	OCULUM VOLUME	0,4 ml			
SPECIMENS SIZE	25 cm ²		Co	OVER FILM SIZE	1600 mm ²			
Reagents	The validity of media and reagents have been verified according to Internal procedure. - Suspension medium: 1/500 nutrient broth NUTS Water for Injection (WFI) - Triptic Soy Sgar (TSA) - Neutralizer CEN (NEU CEN) - Phosphate-buffered physiological saline (PBSS)							
Equipment	The val Standa - Lamir - Spect - Wate - Micro - Clima	 andard microbiology laboratory equipment has been assured by internal. andard microbiology laboratory equipment has been used: aminar flow filtered work area Spectrophotometer Nater bath Vicropipettes Climate Chamber 35±1°C, RH>90% 						



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MATERIALS	Cover film, that is 0,05-0,10 mm thick as recommended, that does not affect bacterial growth, made of polyethylene or polypropylene has been used.
ASSAY	Three specimens of 5.0×5.0 cm square samples for each of the treated specimens provided by Sponsor and of Negative control (provided by Eurofins Biolab S.r.l.) have been prepared for each strain and time point tested (t0 and 24hours). Separately for each test strain, 0,4 ml of standardized culture at 2,5-10×10 ⁵ cells/ml has been added to the specimen then the inoculum has been covered and gently press down with a 40x40 mm film so that the test inoculum spreads to, but does not leak beyond, the edges of the film. The specimens inoculated have been incubated at $35\pm1^{\circ}$ C, 90% RH. At t0 and after the specified contact time, viable microorganisms have been enumerated by pour plate method on TSA at $35\pm1^{\circ}$ C for 24 ± 4 hours; then bacterial colonies from each dilution series have been counted and recorded and the Logarithmic reduction of bacteria from Treated versus Negative Control samples at specified contact time has been calculated.
CALCULATION	Number of colonies recorded in plates containing 30 to 300 colonies has been used for calculation. If the number of colonies in plates containing the 1 ml aliquots of undiluted recovered from specimen is <30, this number is used. When there are no colonies recovered in any plates the number of colonies is considered as "<1". For each test specimen, the number of viable bacteria recovered has been calculated according with following equation: $N = (100 \times C \times D \times V)/A$ where <i>N</i> is the number of viable bacteria recovered per cm ² per test specimen; <i>C</i> is the average plate count for the duplicate plates; <i>D</i> is the dilution factor for the plates counted; <i>V</i> is the volume, in ml, added to the specimen; <i>A</i> is the surface area, in mm ² , of the cover film. The geometric mean of the number of viable bacteria recovered for each set of test specimens has been calculated and this value expressed to two significant figures.
ASSAY VALIDITY CRITERIA	 When the three conditions are satisfied, the test is deemed valid. If any of these conditions are not met, the test is not considered valid and the specimens shall be retested. 1) The logarithmic value of the number of viable bacteria recovered immediately after inoculation from the untreated test specimens shall satisfy the following requirement: (Lmax - Lmin)/(Lmean) ≤ 0,2 where Lmax is the Log of the maximum number of viable bacteria found on a specimen; Lmin is the Log of the minimum number of viable bacteria found on a specimen; Lmean is the Log of the mean number of viable bacteria found on the specimens. 2) The average number of viable bacteria recovered immediately after inoculation from the untreated test specimens shall be within the range 6,2×10³ cells/cm² to 2,5×10⁴ cells/cm². 3) The number of viable bacteria recovered from each untreated test specimen at 24 h shall not be less than 6,2×10¹ cells/cm².
ANTIBACTERIAL EFFECTIVENESS	The value of the antibacterial activity can be used to characterize the effectiveness of an antibacterial agent. According to ISO 22196:2011, the antibacterial-activity values used to define the effectiveness shall be agreed upon by all interested parties.



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	When the test is deemed valid, the antibacterial activity is calculated using following formula:								
CALCULATION OF THE ANTIBACTERIAL ACTIVITY	R = (Ut - U0) - (At - U0) = Ut - At Where: R is the antibacterial activity; U0 is the average of the Log cells/cm2, recovered from untreated test specimens at t0; Ut is the average of the Log cells/cm2, recovered from untreated test specimens after 24 At is the average of the Log cells/cm2, recovered from treated test specimens after 24								
	At is the average of	the Log cells/ch	12, recovered from	treated te	st specime	ens atter 24 h.			
	Assay Validity Criter average number of v and the values of U	viable bacteria r $_{0}$, U_{t} and A_{t} , and	d. The number of vi ecovered from each the antibacterial ac	able bacte n specime tivity calc	eria in the n (express ulated are	test inoculum and sed as cfu/cm ²) reported:			
	Number of viable b	pacteria in the t	est inoculum	1					
	STRA	IN	RESULT (cfu/ml)	RESULT (cfu/ml) Bacterial concentratio Target 2,5×10⁵≤x≤10×1 cfu/ml		RESULT (cfu/0,4 ml)			
	S. aureus AT	CC6538P	8,30E+05	Com	plies	3,30E+05			
	E. coli ATC	C8739	7,90E+05	Com	plies	3,20E+05			
	Average number of viable bacteria recovered from each specimen expressed as cfu/cm ² and value of U ₀ . U _t and A _t calculated								
_	STRAIN	Contact time	Specimen	Geon me (cfu/	netric ean cm²)	Log _{cfu/cm²}			
RESULTS	S. aureus ATCC6538P	to	Untreated (U ₀)	2,25E+04		4,35			
		4	Untreated (Ut)	1,62	E+05	5,21			
		L24	Treated (A _t)	<1,00E+00		<0,00			
		to	Untreated (U ₀)	1,72E+04		4,24			
	<i>E. coli</i> ATCC8739	4	Untreated (Ut)	1,46	E+06	6,16			
		L24	Treated (A _t)	<1,00E+00		<0,00			
	Antibacterial activity calculated as Log Reduction and % Reduction								
	STRAIN	t (h)	R Antibacterial A	ctivity	%	Reduction			
	S. aureus ATCC6538P	24	>5,21			>99,999			
	E. coli ATCC8739	24	>6,16		:	>99,9999			
CONCLUSIONS	On the basis of the obtained results, in compliance with the assay validity criteria, can be stated that the test items" PAINT 20" tested at 24 hours of contact time, has a antibacterial activity >5 (equivalent to a percentage reduction of viable microorganisms >99.999%) for <i>Staphylococcus aureus</i> ATCC6538P and has a antibacterial activity >6 (equivalent to a percentage reduction of viable microorganisms >99.999%) for <i>Staphylococcus aureus</i> ATCC6538P and has a antibacterial activity >6 (equivalent to a percentage reduction of viable microorganisms >99.999%) for <i>Escherichia coli</i> ATCC8739 in adopted experimental conditions.								
ADDENDA									

Eurofins Biolab Srl – via B.Buozzi 2, Vimodrone (Milano), Italy - P.IVA / VAT Number: 007620140960 Tel: +39-022507151 – Fax: +39-0225071599 – E-mail: InfoFarma@eurofins.com

> Reviewed and electronically signed for Study Technical Supervisor Approval by Fabiana Faccioli, Employee for Eurofins Biolab Srl, on 12-Apr-2021 17:44:53 UTC+02:00



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	TIKKURILA OYJ									
Sponsor	KUNINKAALANTIE 1	FI-01301								
	VANTAA									
	FINLAND									
EUROFINS PRODUCT TESTING DENMARK A/S										
Monitor	NITOR SMEDESKOVVEJ 38									
8464 GALTEN										
	DENMARK									
- ISO 21702:2019 - Measurement of antiviral activity on plastics and other non-porous surfaces. - EN14476:2013+A2:2019 – Chemical disinfectants and antiseptics – Quantitative suspension test for the evaluation of virucidal activity in the medical area - Test method and requirements (Phase 2/Step 1).										
Тезт Ітем										
PRODUCT NAME §	UCT NAME § Paint 20									
MATRIX OF THE PRODUCT §	Biocide and Antimicrob	ials								
BATCH N. §	Laboratory batch; 21LLI01	CODE §	FIVARKI 2	R21LLI02_SG420, R01, version						
MANUFACTURING DATE §	09-Mar-2021	EXPIRY DATE §	09-Mar-20	023						
MANUFACTURER §	Tikkurila Oyj									
Active Ingredients §	glass, oxide, silver pho %, BIT 0,027 w-%, ZnC	sphate 0,3%, Sodi 0 0,023 w-%	um pyrithioi	ne (NaPt, 0,021 w-%), IPBC 0,05 w-						
MATERIAL ITEM ALIQUOT	LV-MAT-FOV7-078-0H	l25:a								
PARCEL REGISTRATION N.	IP-LV-2021077-AHV	RECEIVING DATE		18-Mar-2021						
STORAGE CONDITIONS §	Room temperature (20) ± 5°C)								
REFERENCE ITEM										
PRODUCT NAME §	Blank									
PARCEL REGISTRATIO N.	IP-LV-2021077-AHV	RECEIVING DATE		18-Mar-2021						
MATERIAL ITEM ALIQUOT	LV-MAT-FOV7-078-0H	H26:a								
§ INFORMATION PROVIDED BY THE	ESPONSOR									
Analysis Starting	14 Apr 0004	A	D	00 4 2004						
DATE	14-Apr-2021	14-Apr-2021 ANALYSIS ENDING DATE 20-Apr-2021								



			Page: 2 of 3					
EXPERIMENTAL CONDITION	NS							
TEST TEMPERATURE	25°C ± 1°C							
Humidity	90%							
CONTACT TIMES	24 hours							
INACTIVATION OF THE PRODUCT	Iced maintenance medium							
INCUBATION TEMPERATURE	37°C ± 1°C (with 5% CO	37°C ± 1°C (with 5% CO ₂)						
TEST VIRUSES	Betacoronavirus 1 (Bovi	ine Corona Virus) strain S3	379 Riems - FLI (RVB-0020)					
Cell lines	PT cell line - FLI CCLV-	RIE 0011						
Note	As a low amount of res estimation of residual v Large Volume Plating-n mixture recovered from contact time, has been d cells.	idual virus could be experi irus has been performed nethod (LVP) as per EN14 the three treated test spe- listributed undiluited to 80 v	cted with the main test specimen an for these samples also by using the 4476:2013+A2:2019. In this case, the cimens (test item), upon 24 hours of vells of a six-wells plate containing PT					
VALIDITY AND EFFICACY CRITERIA	 The virus titer recospecimens shall sati (Lmax - Lmin) / (Lm from a specimen; Lr Lmean: Log10 of specimens). The average amoun untreated test specine 6.08/ cm². The amount of virus for 24 hours shall not for 24 hours shall not for 24 hours shall not for 24 hours shall not. The suppressive efficiency of the specimens no cytot. The virus titer of untreated test specine. Check of viral inactivat. The judgement of the vit test run will be conducted. The value of the antiviral agent. According define the effectiveness. 	vered immediately after sfy the requirement of the mean) $\leq 0,2$. (<i>Lmax</i> : Log ₁₀ min: Log ₁₀ of the minimum the mean number of T and of virus recovered immediately and the mean recovered from each untrest recovered from each untrest to be less than lg ID50 = 2.8 ciency of the agent's activity reated test specimens as we by control is not mens or the treated test specimens and according to the acceptation the tested specimen will be all activity can be used to ing to ISO 21702:2019, shall be agreed upon by a	inoculation from the untreated test following Formula: of the maximum $TCID_{50}$ recovered $TCID_{50}$ recovered from a specimen; TCID50 recovered from the three mediately after inoculation from the nge of lg $ID_{50} = 5.40/cm^2$ to lg $ID_{50} =$ eated test specimen after contacting $3/cm^2$. ty is to be confirmed: vell as with the three treated test is visible; ot different from the virus titer of the ecimens. the assessment of the validity of the ance criteria of the ISO 21702:2019. reported as logaritmic reduction and characterize the effectiveness of an the antiviral-activity values used to all interested parties.					
	Reduction Factor after	the contact times (Log an Kärber Metho	nd %) obtained with the Spearman-					
			24 hours					
RESULTS	Betacoronavirus 1 (BCoV) strain S379 Riems	2.50 ± 0.047	99.68%					
		See Addendum	N.1					

	Page: 3 of 3
	CAUSES A REDUCTION in the virus titre of Bovine Coronavirus (bCoV) strain S379
	<i>Riems</i> equal to 2.50 ± 0.047 (99.68%) with the Spearman-Kärber Method.
CONCLUSIONS	With the LVP method, all wells of the plate showed a positive result (virus detection) and no result is possible according to the Reference Standard.
Addendum	N. 1: RAW DATA ELABORATION (12 PAGES)

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> Reviewed and electronically signed for Study Technical Supervisor Approval by Elena Morelli, Employee for Eurofins Biolab Srl, on 29-Apr-2021 17:30:12 UTC+02:00

💸 eurofins	Measurement of antiviral activity on plastics and other non- porous surfaces EDR: 1-P-QM-TEM-9095730											
		١	Norma (S	Standard): ISO 21	702:201	9					
Data inizio (Started on):	4/04/21		D	ata fine	sperime	entazione	e (Exper	imentati	on finish	ed on):	20/0	4/21
Rapporto No (Report No) : STU	_V21AA152	26-1			ID	Campio	ne (ID s	ample):	LV-N LV-N	/AT-FOV /AT-FOV	7-078-0 7-078-0	H25:a H26:a
Citotossicità <i>(Cytotoxicity)</i> PT CCLV-RIE 0011												
	ſ	Replica	К-		Diluizio	ne sosta	inza in e	same (Test item	dilution)	К-
Condizioni testate (Test condition)		B	0	1	2	3	4	5	6	7	8	
Blank	ŀ	C	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0
UNTREATED 1	ļ	E	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0
PT CCLV-RIE 0011	-	Endpoint	0.0	00	0.0	0.0	0.0	0.0	00	0.0	0	0
			0.0	0.0	0.0	0.0	0.0	0.0	Cell dest	truction:	VA	LID
									Log 7	FCID50:	0.	50
	Г	-			Diluizio	ne sosta	anza in e	esame (Test item	dilution)	
Condizioni testate (Test condition)		Replica	К-	1	2	3	4	5	6	7	8	К-
Blank		В	0	0	0	0	0	0	0	0	0	0
	-		0	0	0	0	0	0	0	0	0	0
UNTREATED 2	ŀ	E	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0
PT CCLV-RIE 0011	ļ	G	0	0	0	0	0	0	0	0	0	0
		Endpoint	0.0	0.0	0.0	0.0	0.0	0.0	0.0 Cell dest	0.0	0.0	0.0
									Log 7	rciD50:	0.	50
One think to take (Track and With the		Replica	К-		Diluizio	ne sosta	anza in e	esame (Test iten	n dilution))	К-
Condizioni testate (Test condition)		B	0	1	2	3	4	5	6	7	8	0
Blank	ŀ	C	0	0	0	0	0	0	0	0	0	0
		D	0	0	0	0	0	0	0	0	0	0
UNTREATED 3	Ĺ	E	0	0	0	0	0	0	0	0	0	0
	ŀ	F	0	0	0	0	0	0	0	0	0	0
PT CCLV-RIE 0011	-	Endpoint	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	00	0
			0.0	0.0	0.0	0.0	0.0	0.0	Cell dest	truction:	VA	LID
									Log	TCID50:	0.	50

Data verifica Approver (Approver verification date): 29/04/21

Sigla Tecnico e data (Technician signature and date): CS 29/04/24

Sigla Approver e data (Approver signature and date): 20 25d, 4

Revision: 1	Local reference: Mod. PS/MIC/121.D
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💸 eurofins	Measurement of antiviral activity on plastics and other non- porous surfaces EDR: 1-P-QM-TEM-909573							95730			
		Norma (S	Standard	i): ISO 21	702:201	9					
Data inizio (Started on):	14/04/21	D	ata fine	sperime	entazione	e (Exper	imentati	ion finish	ed on):	20/0-	4/21
Rapporto No (Report No): ST	ULV21AA1526-1			ID	Campio	ne (ID s	ample) :	LV-N LV-N	1AT-FO\ 1AT-FO\	/7-078-0 /7-078-0	H25:a H26:a
Citotossicità <i>(Cytotoxicity)</i> PT CCLV-RIE 0011											
	Deelies	K		Diluizio	ne sosta	anza in e	same (Test iterr	dilution)	V
Condizioni testate (Test condition)	Керііса	K-	1	2	3	4	5	6	7	8	К-
Paint 20	В	0	0	0	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0	0	0	0
TREATED 1				0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0	0	0
	Endpoint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		r						Cell dest Log 7	ruction: CID50:	VA 0.4	LID 50
	Replica	К-		Diluizio	ne sosta	anza in e	esame (Test item	dilution)	к-
Condizioni testate (Test condition)	B	0	1	2	3	4	5	6	7	8	0
Paint 20	C	0	0	0	0	0	0	0	0	0	0
	D	0	Ō	0	Ō	0	0	0	0	0	0
TREATED 2	E	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
PT CCLV-RIE 0011	G	0	0	0	0	0	0	0	0	0	0
	Endpoint	0.0	0.0	0.0	0.0	0.0	0.0	Cell des Log ⁻	0.0 truction: CID50:	0.0 VA 0.	0.0 LID 50
	[Diluizio	ne sosta	anza in e	esame (Test iten	1 dilution)	
Condizioni testate (Test condition)	Replica	K-	1	2	3	4	5	6	7	8	К-
Paint 20	В	0	0	0	0	0	0	0	0	0	0
i ant 20	С	0	0	0	0	0	0	0	0	0	0
TOFATED A		0	0	0	0	0	0	0	0	0	0
IREATED 3		0	0	0	0	0	0	0	0	0	0
	G	0	0			0	0	0	0	0	0
PT CCLV-RIE 0011	Endpoint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	I							Cell des Log	truction:	VA 0.	LID 50

Data verifica Approver (Approver verification date): 29/04/21

Sigla Tecnico e data (Technician signature and date): 2910421

Sigla Approver e data (Approver signature and date): En 2906 4

Revision: 1	Local reference: Mod. PS/MIC/121.D	
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💸 eurofins	eurofins Measurement o		EDR: 1-P-QM-TEM-9095730			
	Norr	Norma (Standard): ISO 21702:2019				
Data inizio (Started on):	14/04/21	Data fine sperimentazione (Experimentation	on finished on): 20/04/21			
Rapporto No (<i>Report No</i>) :	STULV21AA1526-1	ID Campione (ID sample):	LV-MAT-FOV7-078-0H25:a LV-MAT-FOV7-078-0H26:a			

Titolazione virus (Virus Titration)

Betacoronavirus 1 (Bovine Corona Virus) strain S379 Riems RVB-0020

	Replica	ĸ			Diluizio	one virus	(Virus	dilution)			K
Condizioni testate (Test condition)	Replica	n-	1	2	3	4	5	6	7	8	n-
	В	0	4	4	4	4	2	0	0	0	0
	С	0	4	4	4	4	0	0	0	0	0
Botacoronavirus 1 (Boving Corona Virus) strain \$370 Piems PVR	D	0	4	4	4	4	2	0	0	0	0
	E	0	4	4	4	4	0	0	0	0	0
0020	F	0	4	4	4	4	0	0	0	0	0
	G	0	4	4	4	4	1	0	0	0	0
	Endpoint	0.0	100.0	100.0	100.0	100.0	50.0	0.0	0.0	0.0	0.0
								Cell dest	ruction:	VA	LID
								Log T	CID50:	5.	00

Data verifica Approver (Approver verification date): 29/04/21

Sigla Tecnico e data (Technician signature and date): ______ 29104124

Sigla Approver e data (Approver signature and date): <u>CC 28044</u>

Revision: 1	Local reference: Mod. PS/MIC/121.D	
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Data inizio (Started on): 14/04/21 Rapporto No (Report No): STULV21AA1526-1 Controllo sensibilità al virus (Control of cell sensitivity to virus) PT PT CCLV-RIE 0011 Replica Condizioni testate (Test condition) Replica NEGATIVE CONTROL (UNTREATED CELLS) B REPLICA 1 E F G G Endpoint NEGATIVE CONTROL (UNTREATED CELLS) B REPLICA 1 E F G G Endpoint REPLICA 2 E	Norma a K- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Standard Data fine 3.0 4): ISO 21 sperime ID 4 4 4 4 4 4 4 4 100.0	702:2015 entazione Campior Diluizic 5 0 4 0 4 0 50.0 Cell dest Log T	(Experi- ne (ID sa one virus 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	imentati ample) : s (Virus 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	on finish LV-N LV-M dilution) 8 0 0 0 0 0 0 0 0 0	ed on): IAT-FOV IAT-FOV IAT-FOV 0 0 0 0 0	20/04 7-078-0H 7-078-0H 10 0 0 0 0	4/21 125:a 126:a K- 0 0 0
Data inizio (Started on): 14/04/21 Rapporto No (Report No): STULV21AA1526-1 Controllo sensibilità al virus (Control of cell sensitivity to virus) PT PT CCLV-RIE 0011 Replica Condizioni testate (Test condition) Replica NEGATIVE CONTROL (UNTREATED CELLS) B C D REPLICA 1 F G Endpoin Condizioni testate (Test condition) Replica REPLICA 1 F G Endpoin Replica G REPLICA 1 F G D REPLICA 1 F G G REPLICA 2 F	a K- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 a K- 0 0	Data fine 3.0 4 4 4 4 4 4 4 100.0	sperime ID 4 4 4 4 4 4 4 4 100.0	Diluizio Di Diluizio Di Di Di Di Di Di Di Di Di Di Di Di Di	(Experi- ne (ID sa 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	imentati ample) : 3 (Virus 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 finish LV-N LV-N dilution) 8 0 0 0 0 0 0 0 0 0 0	ed on): IAT-FOV IAT-FOV 0 0 0 0 0 0	20/04 7-078-0H 7-078-0H 10 0 0 0 0	4/21 125:a 126:a K- 0 0 0 0
Rapporto No (Report No): STULV21AA1526-1 Controllo sensibilità al virus (Control of cell sensitivity to virus) PT CCLV-RIE 0011 Condizioni testate (Test condition) Replica NEGATIVE CONTROL (UNTREATED CELLS) B REPLICA 1 F G Endpoin Condizioni testate (Test condition) Replica REPLICA 1 F G Endpoin REPLICA 2 F G D Endpoin F	a K- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 4 K- 0 0	3.0 4 4 4 4 4 100.0	ID 4 4 4 4 4 4 4 100.0	Campior Diluizio 5 0 4 4 0 5 0.0 50.0 Cell dest Log T	ne (ID sa one virus 6 0 0 0 0 0 0 0 0 0 0 0 0 0	ample) : s (Virus 7 0 0 0 0 0 0 0 0 0 0 0 0 0	LV-N LV-N 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0 0 0 0	7-078-0H 7-078-0H 10 0 0 0 0 0	H25:a H26:a K- 0 0 0
Controllo sensibilità al virus (Control of cell sensitivity to virus) PT CCLV-RIE 0011 Condizioni testate (Test condition) REPLICA 1 Condizioni testate (Test condition) Condizioni testate (Test condition) REPLICA 1 REPLICA 2 REPLICA 2	a K- 0 0 0 0 0 0 0 0 0 0 0 0 0 0 a K- 0 0	3.0 4 4 4 4 4 100.0	4 4 4 4 4 4 100.0	Diluizio 5 4 4 0 50.0 Cell dest Log T	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5 (Virus 7 0 0 0 0 0 0 0 0 0 0 0 0	dilution) 8 0 0 0 0 0 0 0 0 0 0	9 0 0 0 0 0	10 0 0 0 0	K - 0 0 0
Condizioni testate (Test condition) Replica NEGATIVE CONTROL (UNTREATED CELLS) B C C REPLICA 1 E F G G Endpoin NEGATIVE CONTROL (UNTREATED CELLS) B Condizioni testate (Test condition) Replica NEGATIVE CONTROL (UNTREATED CELLS) B REPLICA 2 E F G	A K- 0 0 0 0 0 0 0 0 0 0 0 0 0	3.0 4 4 4 4 4 4 100.0	4 4 4 4 4 4 100.0	Diluizio 5 0 4 4 0 4 0 50.0 Cell dest Log T	6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 0 0 0 0 0 0 0 0 0 0 0.0	8 0 0 0 0 0 0 0 0	9 0 0 0 0 0 0	10 0 0 0 0 0	К- 0 0 0
NEGATIVE CONTROL (UNTREATED CELLS) B C D REPLICA 1 E F G G Endpoin NEGATIVE CONTROL (UNTREATED CELLS) B NEGATIVE CONTROL (UNTREATED CELLS) D REPLICA 2 E F G	0 0 0 0 0 0 t 0.0 t 0.0	4 4 4 4 4 100.0	4 4 4 4 4 100.0	0 4 0 4 50.0 Cell dest Log T	0 0 0 0 0 0.0 ruction: CID50:	0 0 0 0 0 0 0 0.0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0
Condizioni testate (Test condition) Condizioni testate (Test condition) Replica Replica 2 E F G G C D REPLICA 2 C F G C C C C C C C C C C C C	0 0 0 0 0 t 0.0	4 4 4 4 100.0	4 4 4 4 100.0	4 0 4 50.0 Cell dest Log T	0 0 0 0.0 ruction: CID50:	0 0 0 0 0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0	0
REPLICA 1 E F G Endpoin Endpoin NEGATIVE CONTROL (UNTREATED CELLS) B REPLICA 2 E F G	0 0 0 t 0.0 t 0.0	4 4 100.0	4 4 100.0	0 4 50.0 Cell dest Log T	0 0 0.0 ruction: CID50:	0 0 0 0.0	0 0 0 0 0	0 0 0	0	0
Condizioni testate (Test condition) Condizioni testate (Test condition) Replica REPLICA 2 G G G C F G C C C C C C C C C C C C	0 t 0.0 t 0.0	4 100.0	4 100.0	0 50.0 Cell dest Log T	0 0.0 ruction: CID50:	0	0	0	0	0
Condizioni testate (Test condition) Replica NEGATIVE CONTROL (UNTREATED CELLS) REPLICA 2 E G	t 0.0	100.0	100.0	50.0 Cell dest Log T	0.0 ruction: CID50:	0.0	0.0	and the loss of	0	0
Condizioni testate (Test condition) Replication NEGATIVE CONTROL (UNTREATED CELLS) B C D REPLICA 2 E F G	K-			Log T	CID50:		0.0		0.0	0.0
Condizioni testate (Test condition) Replica NEGATIVE CONTROL (UNTREATED CELLS) B C D REPLICA 2 E F G	а К-					5.	00	±	0.4	47
Condizioni testate (Test condition) Negative control (UNTREATED CELLS) B NEGATIVE CONTROL (UNTREATED CELLS) C D D REPLICA 2 E F G	0	0.0		Diluizio	one virus	s (Virus	dilution)			К.
NEGATIVE CONTROL (UNTREATED CELLS) C D REPLICA 2 E F G	0	3.0	4	5	6	7	8	9	10	0
REPLICA 2 E F G	0	4	4	0	0	0	0	0	0	0
F G	0	4	4	0	0	0	0	0	0	0
G	0	4	4	2	0	0	0	0	0	0
Endpoir	0	4	4	4	0	0	0	0	0	0
	1 0.0	1 100.0	100.0	Cell dest	ruction:	0.0	0.0	VALID	0.0	0.0
				Log T	CID50:	4.	83	±	0.4	00
Replic	а К -			Diluizi	one viru	s (Virus	dilution)			К-
	0	3.0	4	0	0	0	8 0	9	0	0
NEGATIVE CONTROL (UNTREATED CELLS)	0	4	4	0	0	0	0	0	0	0
REPLICA 3 E	0	4	4	0	0	0	0	0	0	0
F	0	4	4	0	0	0	0	0	0	0
Endpoir	t 0.0	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Cell dest	ruction:		FO	VALID		
			Log TC	Log I ID50 (Av	verage):	4.	50 78	± ±	0.0	45

Sigla Tecnico e data (Technician signature and date): 08 29 04 21

Sigla Approver e data (Approver signature and date): <u>En LPOGU</u>

Revision: 1	Local reference: Mod. PS/MIC/121.D	
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💸 eurofins	Measur	rement	of antiv	viral activ porous s	ity on pl surfaces	astics a	nd other	non-	EDR	:: 1-P-QM	-TEM-909	95730
		Ν	lorma (Standard): ISO 21	702:201	9					
Pata inizio (Started on):	14/04/21		C	ata fine	sperime	ntazione	e (Experi	imentati	on finish	ed on):	20/0	4/21
Rapporto No (Report No):	STULV21AA1526	i-1			ID	Campio	ne (ID sa	ample):	LV-N LV-N	1AT-FOV 1AT-FOV	7-078-01 7-078-01	H25:a H26:a
T CCLV-RIE 0011				1		Diluizi		Aliruo	dilution			
ondizioni testate (Test condition)	R	eplica	K-	3.0	4	5	6	7	8	9	10	К-
Blank		BC	0	4	4	4	0	0	0	0	0	0
		D	0	4	4	4	0	0	0	0	0	0
UNTREATED 1	-	F	0	4	4	0	0	0	0	0	0	0
		G	0	4	4	0	0	Ő	0	0	0	0
	Er	ndpoint	0.0	100.0	100.0	50.0 Cell des	0.0	0.0	0.0		0.0	0.0
						Log T	rCID50:	5.	.00	±	0.4	147
	R	eplica	К-			Diluizi	one virus	s (Virus	dilution)			К-
ondizioni testate (Test condition)		в	0	3.0	4	0	0	0	8	9	<u>10</u> 0	0
Blank		С	0	4	4	4	0	0	0	0	0	0
UNTREATED 2		D E	0	4	4	0	0	0	0	0	0	0
		F	0	4	4	0	0	0	0	0	0	0
	Fr	G	0	4	4	0	0	0	0	0	0	0
						Cell des Log	truction: TCID50:	4.	.67	VALID ±	0.3	346
Condizioni testate (Test condition)	R	eplica	K-	3.0	4	Diluizi 5	one viru: 6	s (Virus 7	dilution)	9	10	К-
Blank		В	0	4	4	0	0	0	0	0	0	0
		D	0	4	4	0	0	0	0	0	0	0
UNTREATED 3		E	0	4	4	0	0	0	0	0	0	0
		F G	0	4	4	4	0	0	0	0	0	0
	Er	ndpoint	0.0	100.0	100.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0
						Cell des	truction:	4	.67	VALID	0.3	346
					Log TC	ID50 (A	verage):	4	.78	±	0.2	271
						ven	incation.	Ū			VA	
				Dat Sigla ⁻ Sigla	a verific Tecnico Approve	a Appro e data (er e data	ver (App Technici a (Approv	orover v ian sign ver sign	erificatio ature an ature an	n date): d date): _ d date): _	29/0 CS 7 En 7)4/21 29104 904
evision: 1 © This document is copyright of Eurofins Scientific	Group		Appr	oved do	nce: Mo cument	d. PS/N	11C/121.I	J	-			
			TP									

💸 eurofins	Measuremer	nt of anti	viral activ porous	vity on pl surfaces	astics a	nd other	non-	EDF	R: 1-P-QM	-TEM-909	95730
		Norma (Standard): ISO 21	702:201	9					
Data inizio (Started on): 14/	04/21	C	Data fine	sperime	ntazione	e (Experi	mentati	on finisł	ned on):	20/0	4/21
Rapporto No (Report No): STULY	/21AA1526-1			ID	Campio	ne (ID sa	ample) :	LV-N LV-N	MAT-FOV MAT-FOV	'7-078-0 '7-078-0	H25:a H26:a
PT CCLV-RIE 0011	Virusj		1		Diluizi	one virus	Virus	dilution	1		
Condizioni testate (Test condition)	Replica	K-	3.0	4	5	6	7	8	9	10	K-
	В	0	4	4	0	0	0	Ō	0	0	0
Paint 20	С	0	4	4	0	0	0	0	0	0	0
	D	0	4	4	4	0	0	0	0	0	0
TREATED 1	E	0	4	4	0	0	0	0	0	0	0
	F	0	4	4	4	0	0	0	0	0	0
	G	0	4	4	0	0	0	0	0	0	0
	Endpoin	t 0.0	100.0	100.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0
				(Cell des	truction:			VALID		
					Log ⁻	FCID50:	4.	.83	±	0.4	100
		r	1		Diluizi	ono viru	Virue	dilution	1		r
Condizioni tostato (Test condition)	Replica	K-	3.0	4	5		7) a	10	K-
	B	0	4	4	4	0	0	0	0	0	0
Paint 20	<u> </u>	0	4	4	0	0	0	0	0	0	0
	D	0	4	4	0	0	0	0	0	0	0
TREATED 2	E	0	4	4	4	0	0	0	0	0	0
	F	0	4	4	0	0	0	0	0	0	0
	G	0	4	4	0	0	0	0	0	0	0
	Endpoin	t 0.0	100.0	100.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0
				. (Cell des	truction:			VALID		
					Log	TCID50:	4.	.83	±	0.4	400
	Replice	K			Diluizi	one virus	s (Virus	dilution)		K
Condizioni testate (Test condition)	Teplica	- N-	3.0	4	5	6	7	8	9	10	N-
Paint 20	В	0	4	4	4	0	0	0	0	0	0
Failt 20	C	0	4	4	0	0	0	0	0	0	0
	D	0	4	4	0	0	0	0	0	0	0
TREATED 3	E	0	4	4	0	0	0	0	0	0	0
	F	0	4	4	0	0	0	0	0	0	0
	G	0	4	4	0	0	0	0	0	0	0
	Endpoin	t 0.0	100.0	100.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0
				(Cell des	truction:			VALID	2.5	
					Log	ICID50:	4	.67	±	0.3	346
				Log TC	ID50 (A [,] Veri	verage): fication:	4	.78 .00	±	0.2 VA	271 LID

Data verifica Approver (Approver verification date): 29/04/21

Sigla Tecnico e data (Technician signature and date): 29/04/24

Sigla Approver e data (Approver signature and date): <u>En 28044</u>

Revision: 1	Local reference: Mod. PS/MIC/121.D	
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💸 eurofins	Measurement of antiviral activity on plastics and other non- porous surfaces	EDR: 1-P-QM-TEM-9095730
	Norma (Standard): ISO 21702:2019	
Data inizio (Started on): 14/	04/21 Data fine sperimentazione (<i>Experimentati</i>	on finished on): 20/04/21

Rapporto No (Report No):

STULV21AA1526-1

ID Campione (ID sample): LV-MAT-FOV7-078-0H25:a LV-MAT-FOV7-078-0H26:a

Procedura test (Test procedure)

Betacoronavirus 1 (Bovine Corona Virus) strain S379 Riems RVB-0020

	Replica	K.			Diluizio	one viru	s (Virus	dilution)			v
Condizioni testate (Test condition)	Replica	N-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	n-
Plank	В	0	4	4	2	0	0	0	0	0	0
Didlik	С	0	4	4	2	0	0	0	0	0	0
	D	0	4	4	2	0	0	0	0	0	0
UNTREATED 1	E	0	4	4	2	0	0	0	0	0	0
	F	0	4	4	2	0	0	0	0	0	0
After ineculation $T = 0$ min	G	0	4	4	2	0	0	0	0	0	0
Alter moculation 1 – 6 mm	Endpoint	0.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
			(Cell dest	truction:			VALID			
				Log 7	CID50:		4.	90	±	0.0	000
							<i></i>				
	Poplica	K.			Diluizio	one viru	s (Virus	dilution)			K
Condizioni testate (Test condition)	Replica	N-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	N-
	B	0	1	1	3	0	0	0	0	0	0

Condizioni testate (rest condition)			2.4	3.4	4.4	5.4	0.4	1.4	0.4	9.4	
Plank	В	0	4	4	3	0	0	0	0	0	0
Blank	С	0	4	4	2	0	0	0	0	0	0
	D	0	4	4	3	0	0	0	0	0	0
UNTREATED 2	E	0	4	4	3	0	0	0	0	0	0
2	F	0	4	4	2	0	0	0	0	0	0
After inequision $T = 0$ min	G	0	4	4	2	0	0	0	0	0	0
After moculation 1 = 0 mm	Endpoint	0.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
			(Cell dest	ruction:			VALID			

Log TCID50:

4.90 ±

0.000

	Replica	K.			Diluizio	one viru	s (Virus	dilution)			K
Condizioni testate (Test condition)	rteplica	N-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	N-
Plank	В	0	4	4	2	0	0	0	0	0	0
Dialik	С	0	4	4	2	0	0	0	0	0	0
	D	0	4	4	2	0	0	0	0	0	0
UNTREATED 3	E	0	4	4	2	0	0	0	0	0	0
	F	0	4	4	2	0	0	0	0	0	0
After ineculation $T = 0$ min	G	0	4	4	2	0	0	0	0	0	0
Arter moculation 1 – Chim	Endpoint	0.0	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0
			(Cell dest	ruction:			VALID			
				Log 7	CID50:		4.	90	±	0.0	00
			Log TC	1D50 (Av	verage):		4.	90	±	0.0	00
			(L _{max}	- L _{min}) /	(L _{mean}):		0.	00		VA	LID
		Loq	TCID50	(Averac	e)/cm ² :		5.	70		VA	LID

Data verifica Approver (Approver verification date): 29/04/21

Sigla Tecnico e data (Technician signature and date): 23/04/24

Sigla Approver e data (Approver signature and date): <u>Enlydy</u>

Revision: 1	Local reference: Mod. PS/MIC/121.D	
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s and other non- EDR: 1-P-QM-TEM-9095730	Measurement of antiviral activity on plastics and other no porous surfaces	🐝 eurofins
2019	Norma (Standard): ISO 21702:2019	
2019	Norma (Standard): ISO 21702:2019	

Data inizio (Started on):

14/04/21

Data fine sperimentazione (Experimentation finished on): 20/04/21

Rapporto No (Report No):

STULV21AA1526-1

ID Campione (ID sample): LV-MAT-FOV7-078-0H25:a LV-MAT-FOV7-078-0H26:a

Procedura test *(Test procedure)* Betacoronavirus 1 (Bovine Corona Virus) strain S379 Riems RVB-0020

Condizioni testate (Test condition)	Popling	K			Diluizio	one viru	s (Virus	dilution)			V
	Treplica	N-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	N-
Plank	В	0	4	4	4	0	0	0	0	0	0
Dialik	С	0	4	4	3	0	0	0	0	0	0
	D	0	4	4	0	0	0	0	0	0	0
UNTREATED 1	E	0	4	4	2	0	0	0	0	0	0
	F	0	4	4	1	0	0	0	0	0	0
After contact T may	G	0	4	4	2	0	0	0	0	0	0
After contact T max	Endpoint	0.0	100.0	100.0	83.3	0.0	0.0	0.0	0.0	0.0	0.0
			(Cell dest	truction:			VALID			
				Log T	CID50:		4.	73	±	0.3	46
			1	Log TCI	D50/ml:		5.	73	±	0.3	46
			Lo	og TCID	50/cm ² :		5.	53		VA	_ID
	Poplico	K			Diluizi	one viru	s (Virus	dilution)			V
Condizioni testate (Test condition)	Replica	N-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	n-
Plank	В	0	4	4	0	0	0	0	0	0	0
Didlik	С	0	4	4	0	0	0	0	0	0	0
	D	0	4	4	0	0	0	0	0	0	0
UNTREATED 2	E	0	4	4	0	0	0	0	0	0	0
	F	0	4	4	0	0	0	0	0	0	0
After contect Toron	G	0	4	4	0	0	0	0	0	0	0
After contact 1 max	Endpoint	0.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			(Cell dest	truction:			VALID			
				Log T	CID50:		3.	.90	±	0.0	00
				Log TCI	D50/ml:		4.	90	±	0.0	00
			1.0		$50/cm^{2}$		4.	70		VA	LID
			_	54 1015							
	D				Diluizi	one viru	s (Virus	dilution)			14
Condizioni testate (Test condition)	Replica	K-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	К-
Diants	В	0	4	4	0	0	0	0	0	0	0
Blank	C	0	4	4	0	0	0	0			0
			4	4			0	0	0	0	0
	D	0	4	4	4	0	0	0	0	0	0
UNTREATED 3	D	0	4 4 4	4 4 4	4 3	0	0	0	0 0 0	0 0 0	0
UNTREATED 3	D E F	0 0 0	4 4 4 4	4 4 4 4	4 3 4	0 0 0	0 0 0 0	0	0 0 0	0 0 0 0	0 0 0 0 0 0
UNTREATED 3	D E F G	0 0 0 0	4 4 4 4 4	4 4 4 4 4 4	4 3 4 2	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0 0.0	4 4 4 4 100.0	4 4 4 4 4 100.0	4 3 4 2 66.7	0 0 0 0 0.0	0 0 0 0 0 0.0	0 0 0 0 0 0.0	0 0 0 0 0 0.0	0 0 0 0 0 0.0	0 0 0 0 0 0.0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0	4 4 4 4 100.0 Cell dest	4 3 4 2 66.7 truction:	0 0 0 0.0	0 0 0 0 0.0	0 0 0 0 0.0 VALID	0 0 0 0 0 0.0	0 0 0 0 0 0.0	0 0 0 0 0 0.0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0	4 4 4 100.0 Cell dest Log 1	4 3 4 2 66.7 truction: TCID50:	0 0 0 0.0	0 0 0 0 0.0 4.	0 0 0 0.0 VALID .57	0 0 0 0 0.0 ±	0 0 0 0 0.0	0 0 0 0 0.0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0	4 4 4 100.0 Cell dest Log T Log TCI	4 3 4 66.7 truction: TCID50: D50/ml:	0 0 0 0.0	0 0 0 0.0 4. 5.	0 0 0 0.0 VALID .57 .57	0 0 0 0 0.0 ±	0 0 0 0 0.0 0.0	0 0 0 0 0 0.0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0	4 4 4 100.0 Cell dest Log T Log T CID	4 3 4 66.7 truction: TCID50: D50/ml: 250/cm ² :	0 0 0 0.0	0 0 0 0.0 4. 5. 5.	0 0 0 0.0 VALID .57 .57 .37	0 0 0 0 0.0 ±	0 0 0 0 0.0 0.4 0.4 VA	0 0 0 0 0.0 0.0 00 LID
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0	4 4 4 100.0 Cell dest Log T Log TCI Dog TCID	4 3 66.7 truction: TCID50: D50/ml: 550/cm ² :	0 0 0 0.0	0 0 0 0.0 4. 5. 5.	0 0 0 0.0 VALID .57 .57 .37	0 0 0 0 0 0.0 ±	0 0 0 0.0 0.0 0.4 0.4 VA	0 0 0 0 0 0.0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0 (Log TC	4 4 4 100.0 Cell dest Log T Log T CID og T CID	4 3 66.7 truction: TCID50: D50/ml: 50/cm ² : verage):	0 0 0 0.0	0 0 0 0 0.0 4. 5. 5.	0 0 0 0.0 VALID .57 .57 .37	0 0 0 0 0.0 ± ±	0 0 0 0.0 0.0 0.4 0.4 VA 0.4	0 0 0 0 0 0.0 0 00 LID 41
UNTREATED 3 After contact T max	E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0 (Log TC g TCID5	4 4 4 100.0 Cell dest Log TCI Dog TCID ID50 (Av 60 (Avera	4 3 4 2 66.7 truction: TCID50: D50/ml: 50/cm ² : verage): age/ml):	0 0 0 0.0	0 0 0 0 0.0 4. 5. 5. 5.	0 0 0 0.0 VALID 57 57 37 40 40	0 0 0 0 0 0 0 0 0 1 0 1 1 ±	0 0 0 0 0.0 0.0 0.4 VA 0.1 0.1	0 0 0 0 0.0 0.0 0 00 LID 41 41
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0.0	4 4 4 4 100.0 (Log TC g TCID5 TCID50	4 4 4 100.0 Cell dest Log TCI Dog TCID Dog TCID D50 (Avera (Averac	4 3 4 2 66.7 truction: TCID50: D50/ml: 50/cm ² : verage): age/ml): ge)/cm ² :	0 0 0 0.0	0 0 0 0 0.0 4. 5. 5. 5.	0 0 0 0 VALID 57 57 37 40 40 20	0 0 0 0 0 0 0 0 1 0 0 1 0 1 1 1 1 1 1 1	0 0 0 0.0 0.0 0.0 VA 0.4 VA 0.1 0.1 VA	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0.0 0.0	4 4 4 4 100.0 (Log TC g TCID50 TCID50	4 4 4 4 100.0 Cell desl Log TCI Dog TCI Dog TCID ID50 (Averac (Averac	4 3 4 2 66.7 truction: [CID50: D50/ml: 50/cm ² : verage): age/ml): age/ml): age//cm ² :	0 0 0 0.0	0 0 0 0.0 4. 5. 5. 5. 5.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0.0 ± ± ±	0 0 0 0.0 0.0 0.0 0.4 0.4 VA 0.1 VA	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
UNTREATED 3 After contact T max	D E F G Endpoint	0 0 0 0 Lo	4 4 4 4 100.0 (Log TC g TCID5 TCID50 Dat Sigla	4 4 4 4 100.0 Cell dest Log TCI Dog TCID iD50 (Av i0 (Averac (Averac) a verific Tecnico	4 3 4 2 66.7 truction: rCID50: D50/ml: j50/cm ² : verage): age/ml): age/ml): ae)/cm ² :	0 0 0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0.0 0.0 0.0 0.4 0.4 VA 0.1 0.1 0.1 VA 29/0 C& 25	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Revision: 1	Local reference: Mod. PS/MIC/121.D	
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💸 eurofins	Measurement of antiviral activity on plastics and other non- porous surfaces	EDR: 1-P-QM-TEM-9095730
	Norma (Standard): ISO 21702:2019	
Data inizio (Started on): 14/0	04/21 Data fine sperimentazione (<i>Experimentat</i>	ion finished on): 20/04/21

Rapporto No (Report No):

14/04/21

Data fine sperimentazione (Experimentation finished on): 20/04/21

STULV21AA1526-1 ID Campione (ID sample):

LV-MAT-FOV7-078-0H25:a LV-MAT-FOV7-078-0H26:a

Procedura test (Test procedure)

Betacoronavirus 1 (Bovine Corona Virus) strain S379 Riems RVB-0020

	Depline	V			Diluizio	one virus	s (Virus	dilution)			V
Condizioni testate (Test condition)	Replica	R-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	n-
Paint 20	В	0	0	0	0	0	0	0	0	0	0
Failt 20	С	0	0	0	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0	0	0	0
TREATED 1	E	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0	0	0
24 HOOK3	Endpoint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Cell des	truction:			VALID			
				Log	TCID50:	≤	1.	90	±	0.0	00
				Log TCI	D50/ml:	≤	2.	90	±	0.0	00
				Red	luction:	≥	2.	50	±	0.1	52
	Replica	ĸ			Diluizio	one viru	s (Virus	dilution)			K
Condizioni testate (Test condition)	Replica	N-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	ⁿ⁻
Paint 20	В	0	0	0	0	0	0	0	0	0	0
Faint 20	С	0	0	0	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0	0	0	0
TREATED 2	E	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0	0	0
24 110 01(3	Endpoint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Cell des	truction:			VALID			
				Log ⁻	TCID50:	≤	1.	90	±	0.0	000
				Log TCI	D50/ml:	≤	2.	90	±	0.0	000
				Red	luction:	≥	2.	50	±	0.1	52
	Poplica	K			Diluizio	one viru	s (Virus	dilution)			K
Condizioni testate (Test condition)	Replica	N-	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4	n-
Point 20	В	0	0	0	0	0	0	0	0	0	0
Fairit 20	С	0	0	0	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0	0	0	0
TREATED 3	E	0	0	0	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0	0	0	0
	G	0	0	0	0	0	0	0	0	0	0
24 110 81(3	Endpoint	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
				Cell des	truction:			VALID			
				Log	TCID50:	≤	1.	90	±	0.0	000
				Log TCI	D50/ml:	≤	2.	90	±	0.0	000
				Rec	luction:	≥	2.	.50	±	0.1	152
			Log TC	ID50 (A	verage):	≤	1.	.90	±	0.0	000
		Lo	g TCID	50 (Aver	age)/ml:	≤	2.	.90	±	0.0	000
			Reduc	tion (Av	erage):	≥	2.	.50	±	0.0	047
		Re	ductio	n % (Av	erage):		99.	68%			
			Da	ta verific	a Approv	ver (App	prover ve	erification	n date):	29/0	04/21
										00-05	ladat
			Sigla	Tecnico	e data (l echnic	ian sign	ature an	d date):	CS 23	104121
			Sigla	Approve	er e data	(Approv	ver sign	ature an	d date):	En 28	0421
			-								
Revision: 1		Loca	refere	nce: Mc	d PS/M	C/121					

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Seurofins Measurement		rement of antiviral activity on plastics and other non- porous surfaces	EDR: 1-P-QM-TEM-9095730
		Norma (Standard): ISO 21702:2019	
Data inizio (Started on):	14/04/21	Data fine sperimentazione (Experimentati	on finished on): 20/04/21
Rapporto No (Report No) :	STULV21AA152	6-1 ID Campione (ID sample):	LV-MAT-FOV7-078-0H25:a LV-MAT-FOV7-078-0H26:a

Result summary

Attività Antivirale (Antiviral Activity)

Betacoronavirus 1 (Bovine Corona Virus) strain S379 Riems RVB-0020

Prodotto (Product)	Paint 20			
	Riduzione Log (Log Reduction)	Riduzione % (% Reduction)		
Tempo di contatto (Contact time)	24 HOURS			
	≥ 2.5 ± 0.047	99.68%		

Data verifica Approver (Approver verification date): 29/04/21

Sigla Approver e data (Approver signature and date): 29064

Revision: 1	Local reference: Mod. PS/MIC/121.D	
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💸 eurofins	Measurement of antiviral activity on plastics and other non-porous surfaces Norma (Standard): ISO 21702:2019						EDR: 1	-P-QM-TEM-9	095730				
Data inizio (Started on): 14/04	/21				Dat	a fine sp	erimenta	azione (E	xperime	entation I	finished on):	20/0)4/21
Rapporto No (Report No): STULV2	1AA1526-1				ID	Campio	one (ID s	ample) :		LV-MAT	T-FOV7-078-	0H25:a	
Procedura test <i>(Test procedure)</i> Betacoronavirus 1 (Bovine Corona Vir	us) strain S37	9 Riems	RVB-002	20								01120.8	
	PLATE	ĸ			Diluizi	one sos	tanza in	esame (Fest iten	n dilutior	ו)		ĸ
Condizioni testate (Test condition)	1	N-	1	2	3	4	5	0 6	7	8	9	10	n-
Paint 20	B	0	2	2	2	2	2	2	2	2	2	2	0
1 ann 20	D	0	2	2	2	2	2	2	2	2	2	2	0
TDEATED 4	E	0	2	2	2	2	2	2	2	2	2	2	0
IREATED 1	G	0	2	2	2	2	2	2	2	2	2	2	0
24 HOURS	H	0	2	2	2	2	2	2	2	2	2	2	0
24 HOURS		0	2	2	2	2	2	2	2	2	2	2	0
								Cell dest Log TCI Red	ruction: D50/ml: uction:		VALII #NUM! #NUM!	D	
	PLATE	к-			Diluizi	one sos	tanza in	esame (Test iter	n dilutior	ו)		К-
Condizioni testate (Test condition)			1	2	3	4	5	6	7	8	9	10	
Paint 20	B	0	2	2	2	2	2	2	2	2	2	2	0
1 4111 20	D	0	2	2	2	2	2	2	2	2	2	2	0
	E	0	2	2	2	2	2	2	2	2	2	2	0
TREATED 2	F	0	2	2	2	2	2	2	2	2	2	2	0
24 HOURS	H	0	2	2	2	2	2	2	2	2	2	2	0
							1	Cell dest Log TCI Red	D50/ml:		VALI #NUM! #NUM!	D	
	PLATE	К-			Diluizi	one sos	tanza in	esame (Test iter	n dilutior	n)		к-
Condizioni testate (Test condition)	1		1	2	3	4	5	6	7	8	9	10	
Paint 20	B	0	2	2	2	2	2	2	2	2	2	2	0
Faint 20	D	0	2	2	2	2	2	2	2	2	2	2	0
	E	0	2	2	2	2	2	2	2	2	2	2	0
TREATED 3	F	0	2	2	2	2	2	2	2	2	2	2	0
	Н	0	2	2	2	2	2	2	2	2	2	2	0
24 HOURS	1	0	2	2	2	2	2	2	2	2	2	2	0
								Cell des Log TCI Red	truction: D50/ml: uction:		VALI #NUM! #NUM!	D	
						R	TCID5 Reduc Reductio	0/mL (A tion (Av n % (Av	verage) erage): erage):		#NUM! #NUM! #NUM!		
						Data	verifica /	Approver	(Appro	ver verifi	ication date):	29/0	04/21
					1	Data Sigla Te	verifica A ecnico e d	Approver data (Tee	(Appro	ver verifi signatui	ication date): re and date):	29/0 CS 2	04/21 2 <u>9</u> 10

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🔅 eurofins	Measurement of antiviral activity on plastics and other non-porous surfaces	EDR: 1-P-QM-TEM-9095730			
	Norma (Standard): ISO 21702:2019				
Data inizio (Started on): 14/0	04/21 Data fine sperimentazione (<i>l</i>	Experimentation finished on): 20/04/21			

Rapporto No (Report No): STULV21AA1526-1 ID Campione (ID sample): LV-MAT-FOV7-078-0H25:a LV-MAT-FOV7-078-0H26:a

Result summary

Attività Antivirale (Antiviral Activity) Betacoronavirus 1 (Bovine Corona Virus) strain S379 Riems RVB-0020

Prodotto (Product)	Paint 20				
	Riduzione Log (Log Reduction)	Riduzione % (% Reduction)			
Tempo di contatto (Contact time)	24 HOURS				
	#NUM!	#NUM!			

Data verifica Approver (Approver verification date): 29/04/21

Sigla Approver e data (Approver signature and date): <u>For 2805</u>U

Revision: 1	Local reference: Mod. PS/MIC/121.E
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