



長庚大學新興病毒感染研究中心

測試報告

測試期間:109 年 08 月 01 日-09 月 30 日

報告日期:109 年 09 月 30 日

以下測試之樣品乃供應廠商所提供及確認:

委託單位: 承奕科技股份有限公司

產品名稱: UV 照射殺菌器

測試目的:

研究承奕科技股份有限公司 UV 照射殺菌器是否具殺滅病毒效果，據以推估或確認有效作用時間及距離，以確保產品具有其宣稱的功效及品質。

測試結果:

將 Coronavirus 229E 塗於玻片上，針對 UV 照射殺菌器，依以下時間等實驗參數先後進行「病原菌空間場曝光殺菌實驗」，再將病毒刮下，以病毒斑試驗測試病毒的存活率。結果顯示，UV 照射殺菌器照射時間為 30 秒時，抑制病毒生長率皆為 99.9%。照射時間為 40 秒時，抑制病毒生長率皆為>99.99%。經由本實驗可證實 UV 照射殺菌器，在特定的照射時間下，可抑制冠狀病毒 229E 的生長。

表一、UV 照射殺菌器抑制冠狀病毒 229E 之結果

UV 照射殺菌器	Viral inhibition rate (%)		
	Test 1	Test 2	Test 3
照射時間			
30 秒	99.9%	98.9%	99.9%
40 秒	>99.99%	>99.99%	>99.99%

將 UV 照射殺菌器依特定時間等實驗參數先後進行「病原菌空間場曝光殺菌實驗」，再將病毒刮下，以病毒斑試驗測試病毒的存活率。將液體加入細胞中，觀察病毒產生病毒斑能力(virus plaque forming)，Viral inhibition rate (%)數值越高，代表抑制病毒能力越好。

注意事項:

- 一.本報告僅就委託單位所提供之樣品進行測試。
- 二.本測試報告數據更正無效。

長庚大學
新興病毒感染研究中心

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PRESIDENT TRANSLATION SERVICE
6F-2, No. 23, Sec. 3, Min Chuan E. Rd., Taipei City
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TRANSLATOR: Tony Huang

109年度北院民認敏字

案 號: 102054 日期: SEP 21 2020
Case No. Date
本文件翻譯人之簽名或蓋章，於臺灣臺北地方法院所屬
民間公證人敏律聯合事務所認證。本翻譯本文義核與
連綴之原文文書文義尚屬相符。公證人 趙 之 敏
Attested at the Chao & Partners Notary Public Office
of Taiwan Taipei District Court, R.O.C., that the
signature(s)/seal(s) of translator in this document
is/are authentic. This translated version is hereby certified
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Chao, Chih-Min
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Research Center for Emerging Viral Infections Chang Gung University Test Report

Test period: August 1 – September 30, 2020

Report date: September 30, 2020

The following test samples are provided by the supplying vendor:

Contractor: Lumos Technology Co., Ltd.

Product title: UV Disinfection Chamber

Purpose

To investigate whether the UV Disinfection Chamber from Lumos Technology Co., Ltd possesses viral inhibition efficacy, and to estimate or validate the effective time and distance of the product to verify its claimed efficacy and quality.

Test results:

Coronavirus 229E was spread over a micro slide and the “pathogen field exposure radiation experiment” was carried out with the test parameters in Table 1. The virus was removed to test survivability via a viral plaque formation test. Results showed that when the irradiation time of the UV Disinfection Chamber was set to 30 seconds, the viral inhibition rate was 99.9%. At 40 seconds, the viral inhibition rate became > 99.99%. Results of this test proved that the UV Disinfection Chamber is able to inhibit the growth of Coronavirus 229E under specific lengths of irradiation time.

Table 1. Results of UV Disinfection Chamber inhibiting the growth of Coronavirus 229E

UV Disinfection Chamber	Viral inhibition rate (%)		
Irradiation time	Test 1	Test 2	Test 3
30 seconds	99.9%	98.9%	99.9%
40 seconds	>99.99%	>99.99%	>99.99%

The UV Disinfection Chamber was used to carry out the “pathogen field exposure radiation experiment” with specific irradiation times as the test parameters. The virus was then removed to test survivability via a viral plaque formation test. Sample liquid containing the virus was added to cells for observation of virus plaque forming ability. A higher value of viral inhibition rate (%) indicates better viral inhibition capability.

Notice:

- I. This report was tested only on the samples provided by the contractor.
- II. Data in this test report will be invalidated if altered.

Chang Gung University
Research Center for Emerging
Viral Infections

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