Katsetustunnistus

Testing certificate

Certificate No: 005
Date: 05.02.2021

Customer: OÜ Respiray

Sample:
Respiray UV-C module

Content of the Work:

The ability of the Respiray UV-C module to reduce viral infectivity compared to Respiray UV-C module without UV light

Materials and instruments used:

Alphaviruses $1x10^7$ PFU
Device: Respiray UV-C module
Control device: Respiray UV-C module without UV light

Experiments and main conclusion:

Alphavirus, like SARS-CoV2 virus, is a membrane single-stranded RNA virus with a size of 70-100 nanometers was used in this testing method. This test determines the ability of a test device to reduce the infectivity of infectious material, as the Alphavirus particles, that had passed through the device compared to a control device. Used air velocity was 30 l/min in both devices.
The assay was performed in triplicate, and the average loss of infectivity was 0.993986 loq.
It means that, the number of virus particles capable of infection was reduced 99.4% when 10,000,000 virus particles were passed through the Respiray UV-C module compared with the control device.

Signature:
Administrative Head of the Core Biosafety Laboratory
Institute of Technology, University of Tartu

Liane Viru

Dokument koosneb katsetustunnistusest ja tulemuste kokkuvõttest 1 lehel ning on välja antud ühes (1) allkirjastatud eksemplaris.

Tartu Ülikool, Tehnoloogia Instituut, Nooruse 1, 50411 Tartu

Katsetustunnistus

Testing certificate

Certificate No: 010
Date: 04.010.2021
Customer:

Respiray OÜ

Sample:

Respiray UV-C module

Content of the Work:

The ability of the Respiray UV-C module to reduce viral infectivity compared to control device without Respiray UV-C module

Materials and instruments used:

Influenza (Ortomyxoviridae) A-flu virus strain H1N1 (A/WSN/1933)- $1x10^7$ FFU/ml
Device: control device with Respiray UV-C module
Control device: control device without Respiray UV-C module

Experiments and main conclusion:

Influenza virus is a membrane single-stranded RNA virus with a size of 80-120 nanometers was used in this testing method. This test determines the ability of a test device to reduce the infectivity of infectious material, as the Influenza particles, that had passed through the device compared to a control device. The assay was performed in triplicate, and the average loss of infectivity was 2.805 loq.
It means that, the number of virus particles capable of infection was reduced 99.2 % when 10,000,000 virus particles were passed through the Respiray UV-C module compared with the control device without UV-C module.

Signature:
Administrative Head of the Core Biosafety Laboratory
Institute of Technology, University of Tartu

Liane Viru

The Document consists of a Testing certificate with a Summary of Results on (1) pages in (1) signed copy.

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