

Anti-Coronavirus Activity Test Report

Date: 2020/10/10

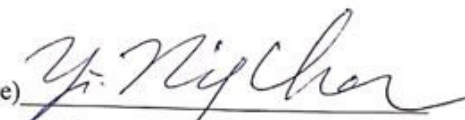
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Report Number: CYCU20201010-ENG**Product Name:** LUFTQI**Contract Company:** Rice Ear Ltd. Co.**Sample Testing Time:** 2020.09.06~2020.09.30**Test Requested:** Anti-Coronaviral Viral Activity Test**Test Laboratory:** Chung Yuan Christian University**Test Organisms:** Feline Coronavirus strain NTU156**Test Reference Methods:** JIS R 1706 : 2013, NF EN 14476+A1, ASTM E1053-97**Test Results:** LUFTQI SPP-A and SPP-C can inhibit the infection of coronavirus.

Table 1 、 Anti-Coronavirus Activity Test against Feline Coronavirus strain NTU156

| | Virus Titer TCID ₅₀ /100 μ L | Avera ge | Reduction Factor (log10) | Reduction Rate (%) | Antiviral Activity |
|------------------|---|--------------------|--------------------------------|-----------------------|-----------------------|
| FCoV R1 | 10 ^{4.2} | | | | |
| FCoV R2 | 10 ^{3.8} | 10 ⁴ | | | |
| LUFTQI SPP-A1 R1 | 10 ^{0.5} | 10 ^{0.32} | 3.68 | 99.98% | YES |
| LUFTQI SPP-A1 R2 | 10 ⁰ | | | | |
| LUFTQI SPP-A2 R1 | 0 | 0 | 4 | 100% | YES |
| LUFTQI SPP-A2 R2 | 0 | | | | |
| LUFTQI SPP-B1 R1 | 10 ^{1.2} | 10 ^{1.23} | 2.77 | 99.83% | NO |
| LUFTQI SPP-B1 R2 | 10 ^{1.25} | | | | |
| LUFTQI SPP-B2 R1 | 10 ^{1.33} | 10 ^{1.1} | 2.9 | 99.87% | NO |
| LUFTQI SPP-B2 R2 | 10 ^{0.57} | | | | |
| LUFTQI SPP-C1 R1 | <1 | 1 | 4 | 99.99% | YES |
| LUFTQI SPP-C1 R2 | <1 | | | | |
| LUFTQI SPP-C2 R1 | <1 | 10 ^{-0.3} | 4.3 | 99.99% | YES |
| LUFTQI SPP-C2 R2 | 0 | | | | |

(Signature)



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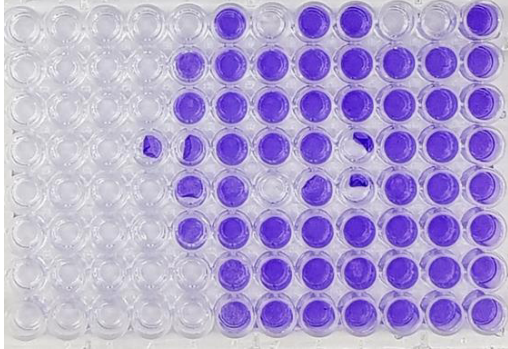
Principle Investigator

Dark purple: live cells without viral infection;

Light purple/Blank: dead cells after viral infection

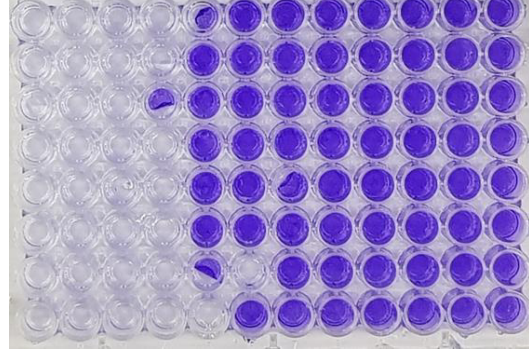
(1) FCoV R1, TCID₅₀/100 μL=10^{4.2}

1 × 10⁻¹ 10⁻² 10⁻³ 10⁻⁴ 10⁻⁵ 10⁻⁶ 10⁻⁷ 10⁻⁸ 10⁻⁹ 10⁻¹⁰ NC



(2) FCoV R2, TCID₅₀/100 μL=10^{3.8}

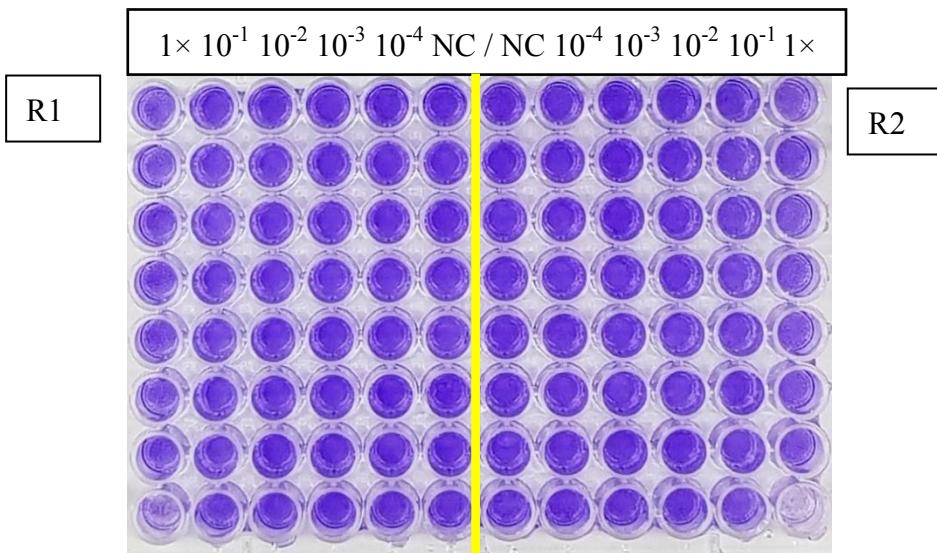
1 × 10⁻¹ 10⁻² 10⁻³ 10⁻⁴ 10⁻⁵ 10⁻⁶ 10⁻⁷ 10⁻⁸ 10⁻⁹ 10⁻¹⁰ NC



Distance: (0.625-0.5)÷(0.625 - 0)=0.2, X=-(-4-0.20)=4.2, TCID₅₀/100 μL =10^{4.2}

Distance: (1-0.5)÷(1 - 0.375)=0.8, X=-(-3-0.80)=3.8, TCID₅₀/100 μL =10^{3.8}

(3) Photocatalyst C1 UVA+UVC 30min R1+R2, TCID₅₀/100 μL < 1



(4) Photocatalyst C2 UVA+UVC 30min R1+R2, TCID₅₀/100 μL = 10⁰

