



**STUDI DEGLI EFFETTI DELLA FOTOCALISI SUI VIRUS**  
study of photocatalysis effects on viruses

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# I RISULTATI : KITASATO RESEARCH CENTER FOR ENVIRONMENTAL SCIENCE

## Kitasato research center for environmental science: results

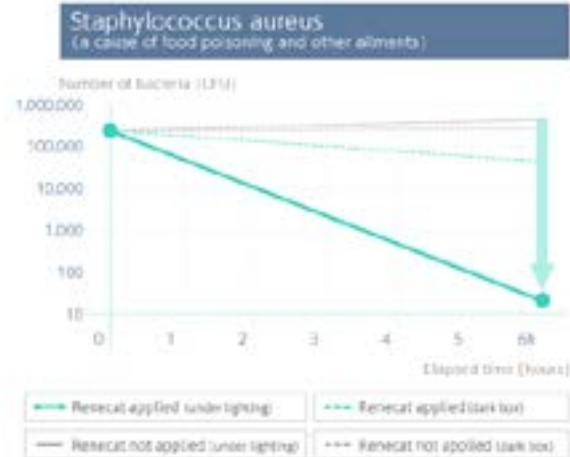
### Staphylococcus aureus (a cause of food poisoning and other ailments)

#### ■ Testing conditions

In conformance with JIS R 1702

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 6000 lx (UV light is cut with a filter)
Test duration	6 hours
Test sample amount / size	10 mg / 5 cm x 5 cm

Testing institute:  
Kitasato Research Center for Environmental Science



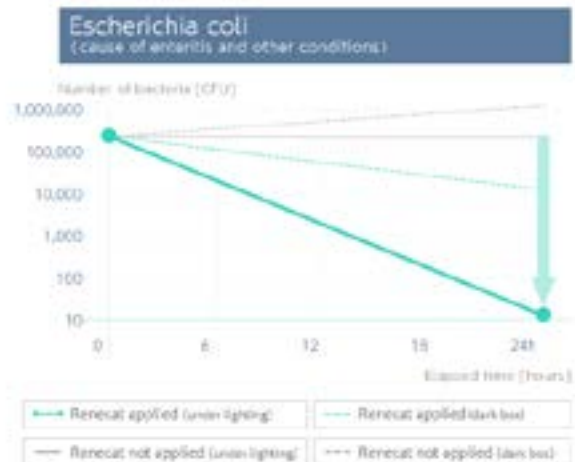
### Escherichia coli (cause of enteritis and other conditions)

#### ■ Testing conditions

In conformance with JIS R 1702

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 6000 lx (UV light is cut with a filter)
Test duration	24 hours
Test sample amount / size	10 mg / 5 cm x 5 cm

Testing institute:  
Kitasato Research Center for Environmental Science



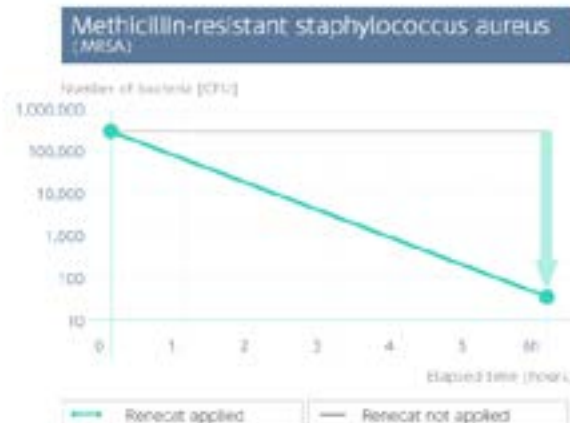
### Methicillin-resistant staphylococcus aureus (MRSA)

#### ■ Testing conditions

In conformance with JIS R 1702

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 6000 lx (UV light is cut with a filter)
Test duration	6 hours
Test sample amount / size	10 mg / 5 cm x 5 cm

Testing institute:  
Kitasato Research Center for Environmental Science



# Enterohemorrhagic Escherichia coli(O157)

## ■ Testing conditions

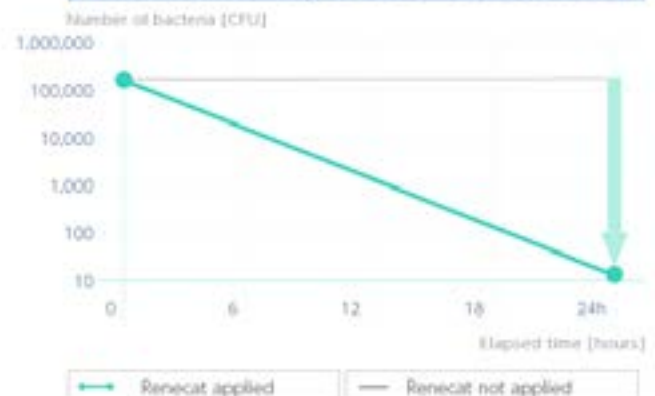
In conformance with JIS R 1702

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 6000 lx (UV light is cut with a filter)
Test duration	24 hours
Test sample amount / size	10 mg / 5 cm x 5 cm

Testing institute:

Kitasato Research Center for Environmental Science

## Enterohemorrhagic Escherichia coli(O157)



# Klebsiella pneumoniae

## ■ Testing conditions

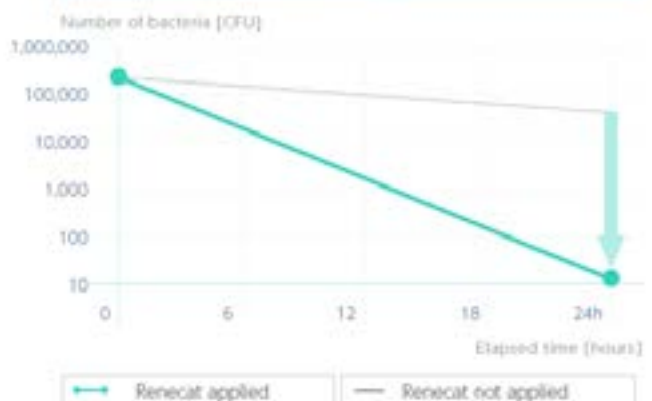
In conformance with JIS R 1702

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 6000 lx (UV light is cut with a filter)
Test duration	24 hours
Test sample amount / size	10 mg / 5 cm x 5 cm

Testing institute:

Kitasato Research Center for Environmental Science

## Klebsiella pneumoniae



# Pseudomonas aeruginosa

## ■ Testing conditions

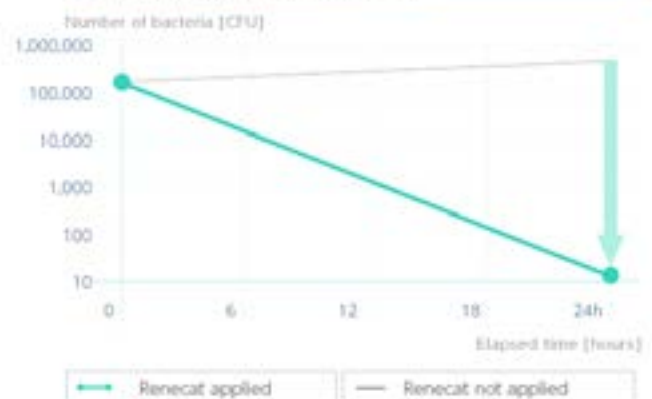
In conformance with JIS R 1702

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 6000 lx (UV light is cut with a filter)
Test duration	24 hours
Test sample amount / size	10 mg / 5 cm x 5 cm

Testing institute:

Kitasato Research Center for Environmental Science

## Pseudomonas aeruginosa



# Escherichia coli

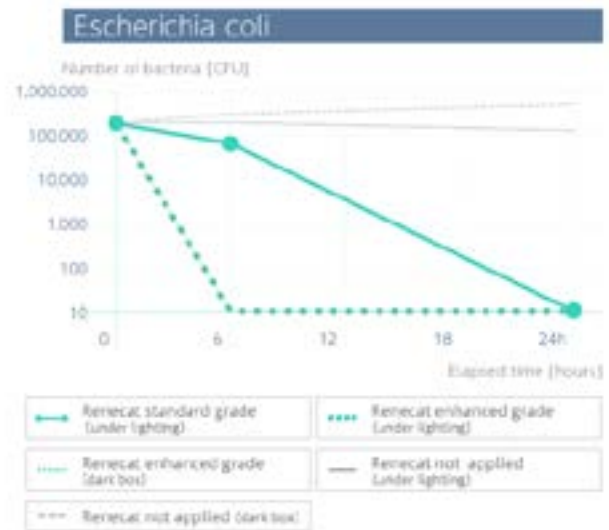
## ■ Testing conditions

In conformance with JIS R 1702

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 9000 lx (UV light is cut with a filter)
Test duration	6 and 24 hours
Test sample amount / size	5mg/2.5×5cm

Testing institute:

Kitasato Research Center for Environmental Science



## Feline calicivirus (substitute virus for evaluating norovirus activity)

• Viral titer: experimentally measured cell infection ability of the virus (the lower the number, the fewer the viruses with infection ability)

### ■ Testing conditions

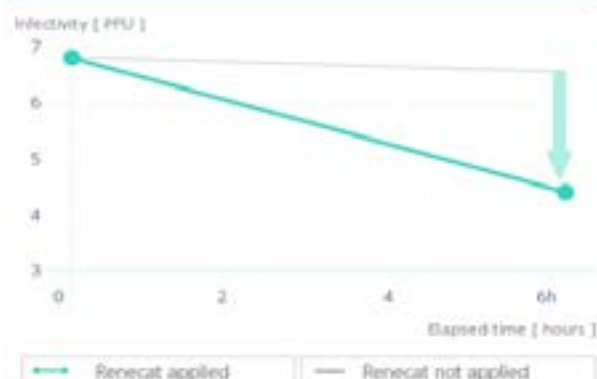
In conformance with the film adhesion method

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 3000 lx (UV light is cut with a filter)
Test sample amount / size	5mg / 2.5cm×5cm

Testing institute:

Kitasato Research Center for Environmental Science

### Feline calicivirus (substitute virus for evaluating norovirus activity)



## Influenza A virus (H1N1)

• Viral titer: experimentally measured cell infection ability of the virus (the lower the number, the fewer the viruses with infection ability)

### ■ Testing conditions

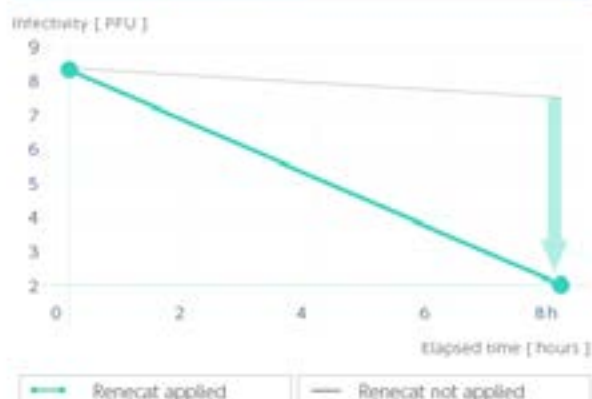
In conformance with JIS R 1756 (film adhesion method)

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 3000 lx (UV light is cut with a filter)
Test sample amount / size	5mg / 2.5cm×5cm

Testing institute:

Kitasato Research Center for Environmental Science

### Influenza A virus (H1N1)



## Adenovirus (Type 3)

• Viral titer: experimentally measured cell infection ability of the virus (the lower the number, the fewer the viruses with infection ability)

### ■ Testing conditions

In conformance with the film adhesion method

Antibacterial activity test method	Film adhesion
Light source	Fluorescent light 6000 lx (UV light is cut with a filter)
Test sample amount / size	5mg / 2.5cm×5cm

Testing institute:

Kitasato Research Center for Environmental Science

### Adenovirus (Type 3)

