

**Because better detection
equals better protection.**

kikkoman
Kikkoman Biochemifa Company

**LUCISWAB
ES**

Ø **2.0-2.2**
Ø **2.8-3.2**
Ø **3.7-4.2**

**HAND HYGIENE, FOLLOW-UP
EDUCATION**

**FOLLOW-UP FOR
INFECTION
PREVENTION**

**MEDICAL INSTRUMENT
CLEANLINESS
ASSESSMENT**

**VERIFICATION
OF ENDOSCOPE
CLEANLINESS**

LuciPac A3 Surface



LuciSwab ES
+ A3 Surface

ATP + ADP + AMP

More reliable and sensitive than
ATP A3 tests, detects what others
don't

HyServe

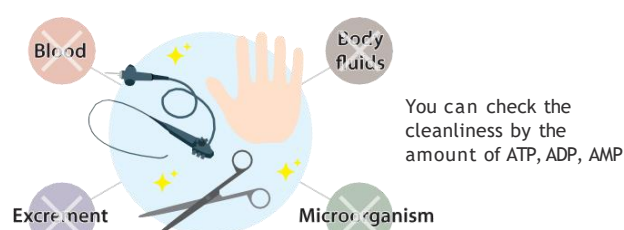
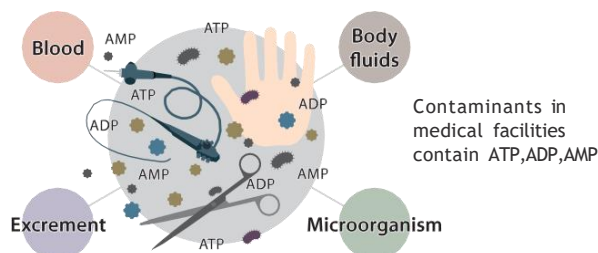
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What is A Novel ATP Test ?

A novel Hygiene Monitoring assay is used to measure the amounts of ATP, ADP and AMP.

ATP, ADP and AMP are present in contaminants of medical facilities (blood, body fluids, excrement, microorganism). If the level of one of the molecules ATP, ADP &/or AMP is high, the cleaning is considered insufficient; If the level is low, the cleaning is considered adequate.

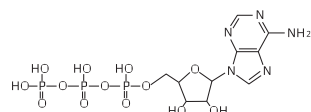


Principle of LuciPac A3 - ATP+ADP+AMP Detection

LuciPac A3 has been developed for the detection of ATP+ADP+AMP. LuciPac A3 allows you to detect not only ATP but also ADP and AMP which have been overlooked.

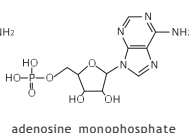
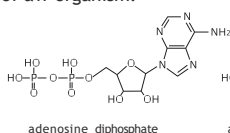
What is ATP?

ATP (adenosine triphosphate) is the primary molecule involved in metabolism in all living organisms.



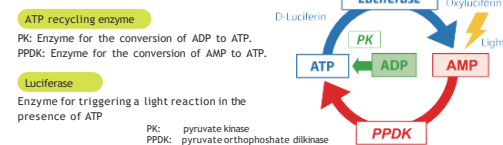
What is ADP, AMP?

ADP (adenosine diphosphate) and AMP (adenosine monophosphate) are derived from ATP during the processing, such as heat treatment and fermentation or death of an organism.



A3 Test

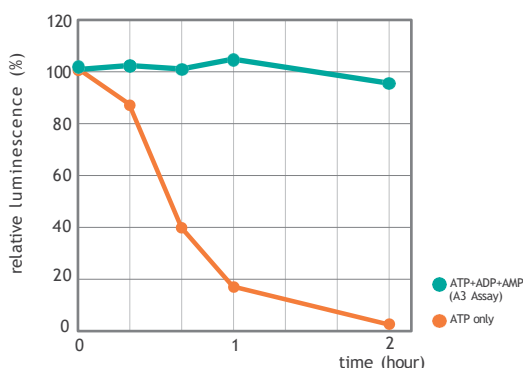
A3 Test has significantly improved the ATP testing, by additionally measuring ADP+AMP offering higher sensitivity and better detection.



A3 - More Reliable and Sensitive



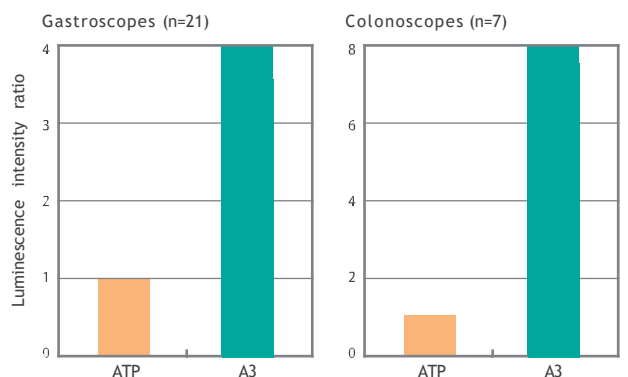
A sample of blood diluted with 10 times water was measured via A3 test and a conventional ATP test.



ATP was degraded dramatically after hemolysis. Yet, the concentration of ATP+ADP+AMP was stable and detected by A3 assay. A3 Test is a more reliable marker for the detection of blood contamination.



Detection of adenosine nucleotides from Gastroscopes and Colonoscopes immediately after patient use.



The detection sensitivity of the A3 Test on residues derived from gastroscopes and colonoscopes were between 3 and 8 times higher than those of ATP method. Thus, A3 Test is more sensitive for monitoring gastrointestinal endoscope hygiene.

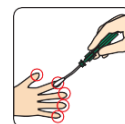
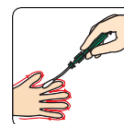
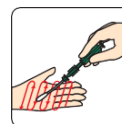
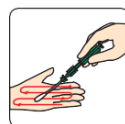
Hand Hygiene, Education, Monitoring and Feedback

| Test locations | Limits (RLU) | Swabbing method |
|--------------------------|--------------|---|
| Hands and Fingers | | |
| Palm (dominant hand) | 2000 | Swab the entire palm of the hand over 5-10 passes in the left-to-right and up-to-down directions as well as between fingers and the tips of fingers |

LuciPac A3 makes training impressive and encourages handwashing.



Handwashing is primary measure of infection prevention and control.



Monitoring for Infection Prevention

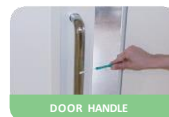
| Test locations | Limits (RLU) | Swabbing method |
|--------------------------|--------------|---|
| Nurses' Station | | |
| Cart | 500 | Swab the entire surface of each arm |
| Stethoscope | 500 | Swab the entire surface of the chest piece |
| Sphygmomanometer pump | 500 | Swab the entire surface of the pump |
| IV pole | 500 | Swab the entire surface of the handle |
| Phone receiver | 500 | Swab the entire surface of surface (inner and outer side) |
| PC keyboard / mouse | 500 | Swab the entire surface |
| Refrigerator(handle) | 500 | Swab the entire surface of the handle (inner and outer side) |
| Hospital Ward | | |
| Overbed table | 500 | Swab each corner and a 10 cm by 10 cm area at the center in all directions |
| Door handle | 500 | Swab the entire surface of the handle |
| Bed side rails | 500 | Swab 10cm-wide areas at the three spots (left and right side,center) of the top of the side rails |
| Nurse call button | 500 | Swab the entire surface of the button |
| Remote control | 500 | Swab the entire surface of the remote control |
| Medical Equipment | | |
| Touch panel | 500 | Swab a 10 cm by 10 cm area frequently touched |

Evaluation for environmental hygiene focuses on those areas frequently touched by hands, which has high possibilities of cross-infection.

It's helpful to improve the cleaning performance.



BED SIDE RAILS



DOOR HANDLE



REMOTE CONTROL



PC



CART



TOUCH PANEL

How to determine the test locations

It is recommended to check the cleanliness level after cleaning. The areas easily contaminated or difficult to wipe out are good candidates for testing.

Cleaning Evaluation of Medical Instrument

| Test locations | Limits (RLU) | Swabbing method |
|--|--------------|--|
| Surgical Instruments | | |
| Parts with uneven surfaces, box locks, and similar parts | 100 | Swab the surfaces of areas other than those touched by hands |
| Devices and parts with complicated designs | 100 | Swab the surfaces of areas other than those touched by hands |
| Endoscope / Duodenoscope <i>*Temporary benchmark values</i> | | |
| Biopsy port | *100 | Swab as far as a cotton swab can be inserted Thoroughly swab the entire inner surface of each channel while turning the cotton swab around |
| Suction port | *100 | |
| Air and water channels | *100 | |
| Forceps elevator | *100 | |
| Distal end | *100 | Thoroughly swab the entire surface of the lens and the area extending approx. 1cm on the outer sides from the tip |
| Inner side of biopsy channel (LuciSwab+LuciPac) | *100 | Insert LuciSwab from the biopsy port, push the stem and take out from the distal end |
| Dialysis Room | | |
| Coupler | 100 | Swab the connectors |

It's recommended to test after cleaning (in the dried state).



Monitoring after manual cleaning is recommended.



FORCEPS ELEVATOR



INSIDE OF BIOPSY CHANNEL

Evaluate coupler of dialysis machine.



Hospital Food Service

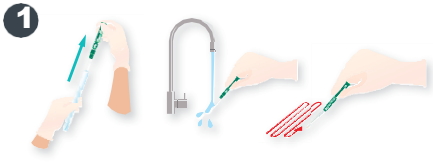
| Test locations | Limits (RLU) | Swabbing method |
|--------------------------|--------------|---|
| Kitchen | | |
| Kitchen knife | 200 | Swab the entire surface of the blade on both sides and the knife bolster |
| Cutting board | 500 | Swab a 10cm by 10cm area at the center in the left-to-right and up-to-down directions |
| Handle | 200 | Swab the entire surface of the handle |
| Food preparation table | 200 | Swab a 10cm by 10cm area at the center in both the left-to-right and up-and-down directions |
| Hands and Fingers | | |
| Hands and Fingers | 2000 | Swab the entire palm of the hand over 5-10 passes in the left-to-right and up-to-down directions as well as between fingers and the tips of fingers |

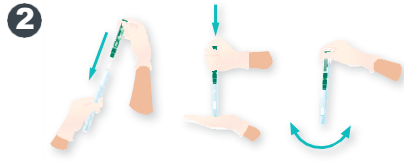
Food borne illnesses one of hospital acquired infections. The main cause of food borne illness is secondary contamination due to inadequate cleaning. Assess cleanliness of kitchenware with ATP Test.


Note: Conduct self-validation and establishing own pass/fail limit is recommended.

Instructions for LuciPac A3 Surface

Allow LuciPac to reach room temperature (20~35°C, 20 minutes) before use.

- 

Moisten the swab with tap water^{*1}, then swab the sample^{*2}.
- 

Insert the swab back into the main body, then push it down. Shake until the liquid reagent slides down and dissolve powdered reagent.
- 


Insert the LuciPac into the chamber of Lumitester to make a measurement. Remove the LuciPac from the Lumitester when the measurement is completed.

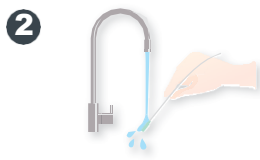
^{*1} Do not use Saline.


^{*2} Measurement results may not be valid if there is disinfectant such as alcohol or detergent remaining on the surface.


Instructions for LuciSwab

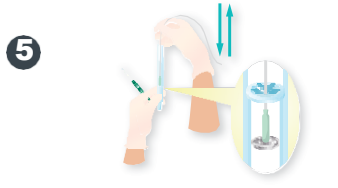
Allow LuciPac to reach room temperature (20~35°C, 20 minutes) before use.

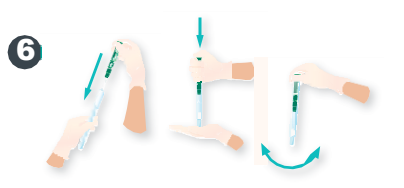
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Put on powder free gloves. Cut the bag vertically from the notch. Take out the LuciSwab ensuring that the swab tip does not touch anything.
- 

Moisten the swab with tap water^{*1} if the endoscope is dry.
- 

Insert the swab from the channel of endoscope. Push the stem and take out from the distal end.
- 

Holding the LuciSwab at 12-13 cm distant point from its cotton bud, remove the sampling stick from LuciPac.
- 

Insert the LuciSwab into the main body of the LuciPac, then wash LuciSwab in releasing reagent. Be careful not to break the aluminum seal.
- 

Remove the LuciSwab and insert the swab back into the main body, then push it down. Shake until the liquid reagent slides down and dissolve powdered reagent.
- 

Insert the LuciPac into the chamber of Lumitester to make a measurement. Remove the LuciPac from the Lumitester when the measurement is completed.

^{*1} Do not use Saline.

^{*2} Measurement results may not be valid if there is disinfectant such as alcohol or detergent remaining on the surface.

LuciSwab ES Ø2.0-2.2 Product Code : 2060355 40 swabs/kit

LuciSwab ES Ø2.8-3.2 Product Code : 2060356 40 swabs/kit

LuciSwab ES Ø3.7-4.2 Product Code : 2060357 40 swabs/kit

Storage condition Store at room temperature preventing high temperature and humidity

LuciPac A3 Surface Product Code : 1702671 100 tests/kit

LuciPac A3 Water Product Code : 1702672 100 tests/kit

Storage condition 2-8°C (Do not freeze)
25°C : 14 days (Unopened)
30°C : 5 days (Unopened)

Expiry 15 months after manufacturing date

^{*Use in combination of LuciSwab and LuciPac. Other commercial cotton and reagent may not generate accurate results.}
^{*Do not use LuciSwab for the area narrower than swab diameter. Otherwise, the cotton bud might fall off or be stuck in.}

^{* Use LuciPac A3 for Lumitester Smart , PD-30 or PD-20. Do not use it for other models.}

Lumitester Smart Product Code: 1902653

Measurement time 10seconds.
Data output RLU (Relative Light Unit)
Power 2 alkaline or nickel hydride rechargeable batteries (AA)
Accessories 2 alkaline batteries (AA), Cleaning brush, USB cable, Strap, Quick Manual

^{* Lumitester is not a medical device.}
^{* Make sure to remove the LuciPac A3 Surface from the Lumitester Smart when measurement is completed. If the Lumitester is stored while the LuciPac A3 Surface is left in the instrument, fluid of LuciPac A3 Surface may leak out and damage the instrument.}
^{* Do not use this product for purposes other than hygiene monitoring.}
^{* LuciPac A3 and Lumitester Smart should not be used for counting general living bacteria or detecting specific pathogens.}

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