Surface ATP Swab

Ringbio

Product #: T006

Read this manual carefully before test, and follow the instructions. Failure to do so may lead to inaccurate results.

Surface ATP Swab is a self-contained, single-use test device that contains a swab for the collection of a sample from surface, which can be used in the detection of adenosine triphosphate (ATP), you can get the result within 5 seconds cooperated with luminometers.

1. Principle

ATP is the universal energy molecule found in all animal, plant, bacterial, yeast, and mold cells, which is an indicator of organic residues and microorganisms. When a sample is collected and ATP is brought into contact with the unique liquid stable luciferase/luciferin reagent in the test device, light is emitted in direct proportion to the amount of ATP present in the sample. The luminometer measures generated light and reports results in Relative Light Units (RLU). RLU result provides information on the level of contamination within seconds. The higher the RLU number, the more ATP present, and the dirtier the surface.

2. Application

Surface ATP Swab can be used in the qualitative detection of ATP in the surface.
The detection limit depends on the ATP luminometer.

3. Components

20 tests / bag, packed in foil pouch.

4. Instructions for use

1) Turning on luminometer before beginning testing, then allow ATP swab to equilibrate to room temperature before use. Holding swab tube firmly, twist and pull top of swab out of swab tube.
2) For surface sample, thoroughly swab a standard 10x10 cm area for a typical flat surface. swab tip is pre-moistened for maximum sample collection.
3) Lift sample collection device up vertically and reinsert in test tube.
4) To activate device, hold swab tube firmly and use thumb and forefinger to break valve by bending bulb forward and backward. Squeeze bulb twice, expelling all liquid down swab shaft.
5) Shake for 3-5 seconds to mix sample and buffer to initiate the reaction. Once activated, sample must be read in luminometer within 30 seconds.
6) Insert swab device into luminometer, close lid and press “Detection” to initiate measurements. The prepared swab should be measured within 15 seconds of activation.

CAUTION if the RLU result is always 0 on unclean surface, please restart the luminometer and read the result again.

5. Interpretation

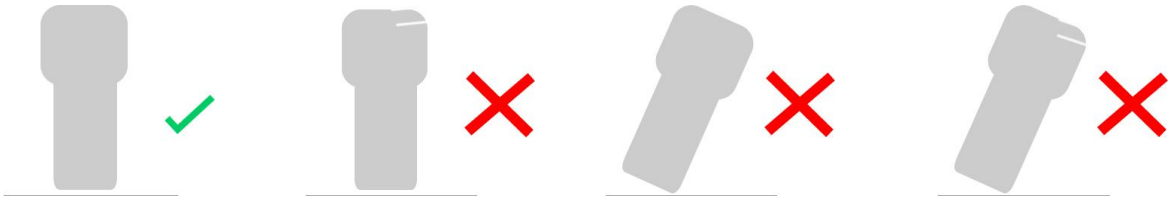
The higher the RLU number, the more contaminated the sample is.
It is required that you set predetermined pass/fail levels so that users of the system know what action is required once the result is known.

You can send the upper and lower limit of RLU level on the luminometer .

6. Safety and precautions

Components of ATP Swab do not pose any health risk when used in accordance with standard laboratory practice and procedures of this insert.

1) ATP Swab devices are for one-time use. Do not reuse.
2) Hold luminometer upright when measuring test devices.
3) Hold ATP Swab test upright when activating.
4) Read ATP Swab test within 15 seconds of activation.
5) Keep ATP Swab test out of direct sunlight.
6) The prepared ATP swabs can be read only one time after activation. Further readings with the luminometer may cause false result or lower RLU due to ATP loss in the sample.



Correct upright position for reading RLU with detection chamber closed

Correct position but detection chamber is open

Wrong leaning position for reading with chamber closed

Wrong leaning position for reading with the chamber open

7. Storage and shelf life

This product can be stored at 2-8 ºC for 12 months, and can be stored at -20 ºC for 18 months. Thawed swabs returned from -20ºC shall be used and shall not be frozen again.

8. References

(1) Turner DE, Daugherity EK, Altier C, Maurer KJ. Efficacy and limitations of an ATP-based monitoring system. J Am Assoc Lab Anim Sci. 2010;49(2):190-195.

(2) Alfa MJ, Olson N, Murray BL. Adenosine tri-phosphate (ATP)-based cleaning monitoring in health care: how rapidly does environmental ATP deteriorate? J Hosp Infect. 2015 May;90(1):59-65. doi: 10.1016/j.jhin.2015.01.020.

Ring Biotechnology Co Ltd

Add: Building 3, Zhongtongtai Science Park, No. 11, Kechuang 14th St, Beijing 100176, CHINA

Tel: +86-10-56267496

Web: www.ringbio.com Email: info@ringbio.com