

# ATP Side By Side Evaluation Kit Instructions

## Description/Intended Use

Adenosine triphosphate (ATP) hygiene monitoring systems detect levels of ATP from both microbial and non-microbial contamination. The amount of ATP collected and measured in systems is expressed in terms of relative light units (RLU). Variation in results between systems can be caused by the enzyme reagent formulation used to produce the bioluminescent reactions, the extractant pre-moistened on the swab bud, the electronic calibration within the luminometer, and/or the variation in the sample being collected. Understanding the correlation of ATP levels to RLU is important when comparing systems. Simple surface sampling comparisons can be highly variable due to sampling technique, surface type, sample type, and possible extreme variations in residue present in different areas on the same surface.

The Side by Side Evaluation Kit eliminates sampling error and provides a consistent and scientifically-based method for comparing systems by pipetting a known amount of ATP directly onto the tips of testing devices. The instruction sheet describes the procedure for comparing two ATP monitoring systems. A monitoring system is defined as any combination of luminometer and compatible ATP test device

## Provided Materials

- 25 Hygiene test devices
- 3 vials ATP dilutions (2 nM, 20 nM, and 200 nM)
- (1) 10uL pipette
- 1 pair sterile gloves
- 1 data record sheet
- Download the Microsoft Excel spreadsheet "ATP Side by Side Evaluation Worksheet" from [www.hygiene.com/instructions](http://www.hygiene.com/instructions)

## **Required Materials (not provided in the kit):**

- Luminometer(s) for comparison
- (25) ATP test devices comparison

## **Instructional Video:**

### **ATP Standards**

1. Allow ATP vials and ATP test devices to equilibrate to room temperature (10 minutes at 21 - 25 C) before use.
2. Using an aseptic technique, carefully remove caps from vials.
3. Turn on luminometer(s)
4. Remove 10uL pipette from the bag. Leave pipette tips in a bag or place them where they will not be contaminated. Place on the pipette tip on the end of the pipette. Be careful not to touch the top of the pipette tip as this could contaminate the ATP standards.
5. Place the pipette 10uL of 2nM ATP standard directly onto the top of one ATP test device from the first set of 25.
6. Activate and measure in the instrument according to instructions.
7. Record result on data record sheet or input directly into Excel worksheet
8. Repeat steps 5 - 7 for more times to give a total of 5 replicates. Use a new pipette tip for each aliquot sample tested.
9. Repeat steps 5 - 8 with 20 nM ATP.
10. Repeat steps 5 - 8 with 200 nM ATP.
11. Repeat steps 5 - 10 with other monitoring systems.

### **Background**

1. Background is determined by testing blank swabs (i.e., without any added sample). Without opening the device, activate and measure 10 test devices for each monitoring system.
2. Record results for each.

## **Interpretation of Results:**

The Microsoft Excel “ATP Side by Side Evaluation Worksheet” downloadable from [www.hygiena.com/instructions](http://www.hygiena.com/instructions) performs all calculations automatically. When comparing results, consider background, repeatability, linearity, sensitivity, and Pass/Fail correlation.

## **Safety & Precautions:**

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

- Test devices are for one-time use. Do not reuse it. For further safety instruction, refer to Safety Data Sheet (SDS).

## **Hygiena Liability**

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## **Contact Information:**

If more information is required please visit us at [www.hygiena.com](http://www.hygiena.com)

If you need further assistance please [click here](#) for support.

