

**RapiScreen™ Dairy 1000 Kit**  
**For Hygiena’s Innovate™ Rapid Microbial Screening System**  
 Product No. KIT4000 (1,000 tests)



**Introduction**

**Description and Intended Use**

Hygiena’s RapiScreen™ Dairy Kit, along with the Innovate™ System luminometer and Innovate™ software, provides a rapid screening method to confirm the absence of microbial contamination in long-life dairy, non-dairy and similar shelf-stable products. The presence/absence of microorganisms is determined by using ATP bioluminescence technology.

The system is intended for use by trained operators.

**Kit Components of the RapiScreen Dairy Kit (1,000 tests)**

Kit Configuration	1,000-Test Kit
Sensilux	10 x 100 test vials
Dilutor DS	10 x 9.8 mL vials
Cellsolver DE	1 x 101 mL vial
ATX	10 x 100 test vials
Dilutor DA	10 x 9.8 mL vials
Microwash	1 x 400 mL bottle
Polypropylene (PP) vials	4 x 50 mL vials
Microplates, 96-well	11 plates

**Test Procedure**

**Getting Started**

1. Remove one vial of each reagent from storage at 2 to 8 °C, and allow reagents to warm to room temperature before reconstitution.

**Note:** To avoid contamination, wear gloves when opening glass vials.

2. Carefully open a vial of Sensilux (yellow cap) and a vial of Dilutor DS (yellow cap). Pour the contents of the Dilutor DS into the Sensilux and swirl gently to mix. Then pour the total contents into a 50 mL PP vial.

*Do not shake.*

3. Carefully open a vial of ATX (red cap) and a vial of Dilutor DA (red cap). Pour the contents of the Dilutor DA into the ATX and swirl gently to mix. Then pour the total contents into a second 50 mL PP vial.
4. The Cellsolver DE and Microwash are ready for use.
5. Place the reagents in the Innovate System reagent holder cooling unit and leave for 15 minutes before use.
6. Prime the Innovate System luminometer with the prepared reagents.

**Protocol**

1. Incubate the sample in its original packaging (or separate container) at 30 °C (or other validated temperature) for a minimum of 48 hours.

**Note:** The typical incubation time for UHT dairy products is 24 – 72 hours. All users should determine the most appropriate sample preparation, incubation times and temperatures based on their product types and microorganisms of interest.

2. Following incubation, shake the sample to ensure any contamination is well-mixed.
3. Pipette 50 µL of the sample into a well of the microtiter plate.
4. Place the microtiter plate in the luminometer and run the appropriate protocol.

The light emitted is then measured and recorded in Relative Light Units (RLUs).

Refer to the *Innovate System Operator Manual* for full instructions on the programming and operation of your instrument.

**Additional Information**

**Controls**

It is recommended to run an instrument blank, reagent blank and ATP positive control daily to ensure the system is functioning properly.

**Interpretation of Results**

Compare the RLU values to the product RLU threshold and determine the pass/fail status of each sample. Refer to the *Innovate System Implementation Guide* or contact your Hygiena® Technical Support Representative to determine how the RLU readings should be interpreted.

Positive results should be further confirmed and identified according to the user-defined microbiology methods for contamination investigations.

**AOAC RI Performance Tested Methods<sup>SM</sup> Certification**

The detection of mesophilic microorganisms using the Innovate System luminometer and the RapiScreen Dairy Kits have earned AOAC RI PTM Certification (License #092301) from the AOAC Research Institute.



The AOAC validation studies included the following matrices:

Matrix
Ultra-high temperature (UHT) bovine milk
UHT plant-based drink (almond drink)
Half and half (10% fat)
Protein-based drink (casein)
Extended shelf life (ESL) plant-based drink (oat drink)



## Kit Storage and Shelf Life

1. The RapiScreen Dairy Kit for the Innovate System must be stored refrigerated at 2 to 8 °C when not in use.
2. The reconstituted RapiScreen reagents are stable for up to 5 days when stored in the Innovate reagent holder cooling unit.
3. Do not mix reagents from different kit lots.
4. The performance of this kit and its components cannot be guaranteed beyond the expiration date stated on the kit box.

## Safety and Precautions

- Intended for *in vitro* use only.
- Use good laboratory practices when performing this assay and when handling samples and materials.
- Dispose of all assay material according to your laboratory standard operating procedures and appropriate prescribed local regulations.

The Innovate System method includes procedures that could result in the growth of potential pathogens to detectable levels. Because pathogens can cause human illness, appropriate safety precautions must be taken and personal protective equipment must be worn when handling samples, media, reagents, glassware, equipment and other supplies that could be contaminated with potentially pathogenic bacteria.

- Reagents used with the Innovate System assays should pose no hazards when used as directed. Before using this assay, please review the Safety Data Sheet (SDS) available at [www.hygiena.com/documents](http://www.hygiena.com/documents).

## Hygiena Liability

Hygiena will not be liable to the user or others for any loss or damage, whether direct or indirect, incidental or consequential from use of these devices. If this product is proven to be defective, Hygiena's sole obligation will be to replace the product, or at its discretion, refund the purchase price. Promptly notify Hygiena within 5 days of discovery of any suspected defect and return the product to Hygiena; contact Customer Service for a Returned Goods Authorization Number.

## Contact Information

For more information, visit [www.hygiena.com/contact](http://www.hygiena.com/contact). For technical support, visit [www.hygiena.com/support](http://www.hygiena.com/support).