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IncuBactTM E.coli Handheld Detection Kit

Description:

The IncuBact is a convenient e.coli field detection kit utilizing Amiscience's handheld fluorometer with built-in thermal heater for in-situ incubation-and-detection. After the sample is prepared in the 0.5-mL sample tube, it is placed in the handheld fluorometer maintained at 38°C for incubation. During the incubation procedure, the e.coli bacteria release an enzyme which reacts with the incubation media to produce a fluorescence signal and detected by the fluorometer. If the signal growth reaches a pre-defined threshold, a positive test is confirmed. Due to the high sensitivity of the fluorometer, single CFU can be detected within as short as 12 hours of incubation. The *in-situ* detection also provides the earlywarning capability for users to identify the presence of e.coli within a shorter time if the quantity of e.coli is higher. By using the "threshold time" of signal growth, one can also quantitatively determine the "equivalent CFU number" of healthy e.coli bacteria in the original sample.

Assay Performance and spec:

- Can be applied to swab surface test, or liquid test (0.5-mL/sample).
- Rapid, convenient, and sensitive. (Semi-quantitative possible.)
- Highly portable field kit using handheld meter for measurement (AC or car power supply needed due to heater requirement).
- Sensitivity: 100-CFU/sample after 9 hours of Incubation, or 1-CFU/sample after 12 hours of incubation for healthy bacteria.
- 2 sets of data can be downloaded to computer through USB interface for analysis.
- Multiple-samples test possible if use separate incubator.

Included Equipment and Assay in the Field Kit: (PN: FK-IB-ECOL)

P/N	Description
FQT-ECOL-B	IncuBact Handheld Thermal Fluorometer for e.coli, including AC power adaptor and manual CD
IB-ECOL-50	E.coli Detection Assay Kit for 50 tests
CC-215	Compact Field Carry Case

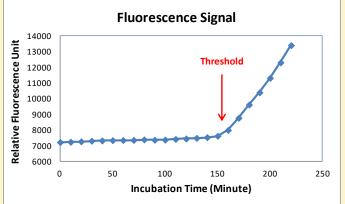
Content of the e.coli Assay Kit (50 tests): (PN: IB-ECOL-50)

Growth Media Powder: 1.2 gram Sample Plastic Vials: 50 pcs Rayon Swab: 50pcs

Disposable water transfer pipet: 50pcs

Simplified Assay Procedure:

- 1. Re-constitute the growth media solution.
- 2. Add growth media into the sample tube, and collect sample (swab surface or liquid).
- 3. Place sample tube in the fluorometer. Press the "Measure" button.
- 4. Wait for 13 hours (or shorter). If the screen shows "Positive" during or at end of incubation, the sample is positive. Otherwise, the screen will show "Negative" at end of incubation.
- 5. If test is positive, based on the table to the right, one can use the "Threshold Time" shown on the screen to semi-quantitatively determine the "equivalent" CFU number of healthy bacteria in the original sample.
- 6. And that is it!!





CFU	Threshold Time (Hr:Min)
~500,000	4:40
~50,000	5:50
~5,000	7:00
~500	8:10
~50	9:20
~5	10:40

^{*} Car power adaptor available for field application.