A rapid and simple screening test for indicating the presence of Bacillus Diarrhoeal Enterotoxin (BDE) in food, food-related samples and enrichment cultures

Using the TECRA Bacillus Diarrhoeal Enterotoxin Visual Immunoassay (VIA™), you can:

- Detect pre-formed BDE in food within 4 hours
- Screen food and environmental samples for the presence of enterotoxin-producing Bacillus spp. in less than 20 hours

The TECRA method has shown excellent correlation with biological assays and epidemiological evidence
- High sensitivity: <1 ng / mL of prepared sample
- Verified to accurately indicate the presence of BDE in food artificially inoculated with Diarrhoeal Enterotoxin as well as in food and faecal samples from actual food poisoning incidents
- Recommended for a wide range of food and food-related samples

All reagents provided ready-to-use
- Easy-to-read results
- Simple extraction step
- The simplicity of the TECRA Bacillus Diarrhoeal Enterotoxin VIA method frees up laboratory time for other tasks and projects
- Depending on your specific needs, the kit can be used manually or automated for large scale testing

You can rely on the extensive training, technical and sales support from Biotrace International and its TECRA distributors

Bacillus cereus and other Bacillus spp. are frequently found in a very wide range of foods, including baby foods, cooked and frozen rice products, cereals, meat products, soups, milk and milk powders, and extended shelf-life cooked-chill meals.

The heat resistant nature of Bacillus spores allows them to survive in many foods that have undergone moderate heat processing and normal cooking processes. Bacillus spp. are known to produce a number of different toxins. Independent studies have shown that the vast majority of strains of Bacillus implicated in food poisoning incidents or outbreaks produce the “NHE” toxin. The TECRA BDE VIA detects the presence of a protein from the NHE toxin complex.
Why test following overnight enrichment of samples?

Various species of Bacillus occur commonly in food. Thus it is important to have a test that can detect Bacillus isolates that have the ability to cause Bacillus Diarrhoeal food poisoning.

BDE-producing Bacillus spp. may only produce a detectable level of BDE after a prolonged growth period. The level of pre-formed toxin in a food sample may be below a detectable level. However, the food may contain viable Bacillus and, if ingested, these organisms may produce enterotoxin in the gut and cause food poisoning.2

Materials Required (not included in the kit)

- Centrifuge (1000-3000g)
- Pipette tips
- Pipettes: 10µL, 20µL, 50µL, 200µL, 5mL
- Polypropylene tubes (approx. 10mL)
- Sodium hydroxide solution (1M, NaOH)
- Hydrochloric acid (conc. HCl)
- Sodium hypochlorite (2%)
- pH paper
- Incubator: 35-37°C

Additional item required when testing for the presence of Enterotoxin-producing species:
- Brain Heart Infusion broth supplemented with 0.1% glucose

Additional items required when testing directly for the presence of toxin in food:
- Homogeniser
- Disposable plastic syringes (approx. 25mL)
- Absorbent cotton wool
- Tris buffer (0.25M, pH 8)

Product Information

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<th>TECRA Product code</th>
<th>No. of Wells</th>
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References
