

## **Plasmid DNA for Fecal Indicator Detection and Identification**

|                 |                                   |
|-----------------|-----------------------------------|
| Art. ID         | NIST-2917                         |
| Unit            | 6 tubes, 1 each level             |
| Deliverydetails | No Dangerous Good /not restricted |

### Description

Designed to help mitigate this issue, NIST-2917 contains 13 genetic markers — known DNA sequences — that can be used to identify a pollution source or estimate the concentration of fecal pollution in a sample. The SRM was constructed from a plasmid, a small, often circular DNA molecule found in bacteria and other cells. A unit of NIST-2917 consists of a box with 6 tubes (Levels). Each Level contains approximately 200 µL of linearized plasmid DNA in 1 x TE buffer pH 8 with 10 ng/µL of yeast tRNA as carrier in a 1.5 mL skirted, screwcap, low-bind, polypropylene, centrifuge vial.

| Text/Information | Analyte/Parameter                 | CAS number | Concentration/Value | Unit    | Method | Source |
|------------------|-----------------------------------|------------|---------------------|---------|--------|--------|
| Level 1          | Plasmid Copy Number Concentration |            | 5,4 ± 1,0           | copy/µL |        |        |
| Level 2          | Plasmid Copy Number Concentration |            | 55,5 ± 3,2          | copy/µL |        |        |
| Level 3          | Plasmid Copy Number Concentration |            | 530 ± 14            | copy/µL |        |        |
| Level 4          | Plasmid Copy Number Concentration |            | 5314 ± 142          | copy/µL |        |        |
| Level 5          | Plasmid Copy Number Concentration |            | 52195 ± 1488        | copy/µL |        |        |
| Level 6          | Plasmid Copy Number Concentration |            | 541287 ± 15558      | copy/µL |        |        |