

EU Reference Laboratory for E. coli

Department of Veterinary Public Health and Food Safety Unit of Foodborne Zoonoses

Istituto Superiore di Sanità



Program for a 5-days training at the EU-RL VTEC, Istituto Superiore di Sanità, Rome, on the identification and characterization of VTEC strains

Day 1 (10:30-17:30)

- Overview of the activities and procedures in place at the EU-RL.
- Opening discussion on the work-plan and overview of the activities to be done during the stage.
- Preparation of the cultures of test and control strains.

Day 2 (9:30-17:30)

- Preparation of DNA templates.
- Conventional PCR for VTEC detection and typing (EU-RL VTEC_Method_01_Rev 0 05/03/2013).
- Molecular serogrouping by conventional PCR (EU-RLVTEC_Method_003_Rev 0 04/17/2013).
- Introduction to Real Time PCR.

Day 3 (9:30-17:30)

- Agarose gel electrophoresis to visualise the PCR results.
- Preparation of DNA samples for Real Time PCR from test and control strains.
- Identification of vtx gene subtypes by conventional PCR (EU-RL VTEC_Method_006_Rev 1)

Day 4 (9:30-17:30)

- Agarose gel electrophoresis to visualise the vtx-subtyping PCR results.
- Real Time PCR for the detection of VTEC genes, according to the EU-RL guideline for the identification and characterization of VTEC by Real Time PCR (EU-RL VTEC_Method_02_Rev 0).

Day 5 (9:30-13:00)

- Analysis of the results obtained.
- General discussion on the activities carried out.
- Questionnaire on the trainee satisfaction toward the stage.

All the five days include explanatory discussions driven by the EU-RL VTEC staff and practical sessions carried out by the trainee with and hands on approach, under the supervision of the EU-RL VTEC staff.