

**Product Information Sheet for NR-101**

**Escherichia coli, Strain NCDC 909-51**

**Catalog No. NR-101**
( Derived from ATCC® 23520™)

**For research use only. Not for human use.**

**Contributor:**
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**Product Description:**

Bacteria Classification: *Enterobacteriaceae, Escherichia*

Agent: *Escherichia coli* (E. coli)

Strain: NCDC 909-51

Serotype: O28a, 28c:K73(B18):NM

Original Source: Human feces

Comment: *Escherichia coli*, strain NCDC 909-51 was deposited at ATCC® in 1967 by the National Communicable Disease Center, Atlanta, Georgia.

E. coli is a gram-negative, rod-shaped bacterium which occurs singly or in pairs. It is a major facultative inhabitant of the large intestine.

The enteroinvasive *E. coli* (EIEC) strain NCDC 909-51 was isolated from the feces of a patient in Katwijk, The Netherlands around 1940. EIEC strains invade and multiply within intestinal epithelial cells, resulting in a dysentery-like enteritis in humans, similar to that caused by *Shigella* species. EIEC pathogenesis requires the expression of genes present both on the chromosome and on a large invasion plasmid, pINV (220,000 bp). The plasmid shares a significant degree of DNA homology with the virulence plasmid described in *Shigella* species, and is structurally and functionally equivalent.

**Material Provided:**

Each vial contains approximately 0.5 mL of bacterial culture in 0.5X Tryptic Soy Broth supplemented with 10% glycerol.

**Packaging/Storage:**

NR-101 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

**Media:**
Tryptic Soy Broth or equivalent
Tryptic Soy Agar or equivalent

**Incubation:**
Temperature: 37°C
Atmosphere: Aerobic

Propagation:
1. Keep vial frozen until ready for use; then thaw.
2. Transfer the entire thawed aliquot into a single tube of Tryptic Soy Broth.
3. Use several drops of the suspension to inoculate a Tryptic Soy Agar slant and/or plate.
4. Incubate the slant and/or plate at 37°C for 24 hours.

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: *Escherichia coli*, Strain NCDC 909-51, NR-101.”

**Biosafety Level: 2**


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