



Escherichia coli (Migula) Castellani and Chalmers

BAA-2471™

Description

Escherichia coli strain 1100101 is a whole-genome sequenced bacterium that was isolated from a respiratory sample. This strain is an NDM-1 reference strain and is resistant to ertapenem and imipenem. The bacterium strain can be used in antimicrobial resistance research, drug development, and respiratory disease research.

Strain designation: 1100101

Deposited As: *Escherichia coli*

Type strain: No

Storage Conditions

Product format: Freeze-dried

Storage conditions: 2°C to 8°C

Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

BSL 2

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories* (BMBL), U.S. Department of Health and Human Services. It is your responsibility to

understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

ATCC highly recommends that appropriate personal protective equipment is always used when handling vials. For cultures that require storage in liquid nitrogen, it is important to note that some vials may leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vial exploding or blowing off its cap with dangerous force creating flying debris. Unless necessary, ATCC recommends that these cultures be stored in the vapor phase of liquid nitrogen rather than submersed in liquid nitrogen.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Growth Conditions

Medium:

ATCC Medium 3: Nutrient agar or nutrient broth

ATCC Medium 2901: Nutrient Medium + 25ug/ml Imipenem

Temperature: 37°C

Atmosphere: Aerobic

Handling Procedures

BAA-2471

1. Open vial.
 2. Using a single tube of #3 broth, withdraw approximately 0.5 - 1 mL with a pipette. Rehydrate the entire pellet.
 3. Aseptically transfer this aliquot back into the broth tube. Mix well.
 4. Use several drops of this suspension to inoculate a #3 agar plate or slant.
 5. Incubate the tubes and plate at 37°C for 24 hours.
 6. Once growth occurs, use several colonies to inoculate a plate of #2901 agar. Only colonies carrying the NDM plasmid will grow, so pick several colonies for the transfer.
 7. Incubate the plate at 37°C for 24 hours.
 8. Once the culture has recovered, all future growth should be on #2901 agar or broth to prevent loss of the NDM plasmid.
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Notes

Growth is initiated on #3 media, then switched to #2901 media with imipenem to prevent plasmid loss.

bla_{KPC} negative by PCR.

bla_{NDM} positive by PCR.

Additional information on this culture is available on the ATCC® web site at www.atcc.org.

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: *Escherichia coli* (Migula) Castellani and Chalmers (ATCC BAA-2471)

References

References and other information relating to this material are available at www.atcc.org.

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