**Klebsiella oxytoca, Strain MIT 10-5242**

**Catalog No. HM-623**

For research use only. Not for human use.

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**Manufacturer:** BEI Resources

**Product Description:**

- **Bacteria Classification:** Enterobacteriaceae, Klebsiella
- **Species:** Klebsiella oxytoca
- **Strain:** MIT 10-5242 (also referred to as 10-5242)
- **Original Source:** Klebsiella oxytoca (K. oxytoca), strain MIT 10-5242 was isolated from human bone in Kansas, USA.\(^1\)\(^2\)
- **Comments:** K. oxytoca, strain MIT 10-5242 (HMP ID 9686) is a reference genome for The Human Microbiome Project (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of K. oxytoca, strain MIT 10-5242 was sequenced at the Broad Institute (GenBank: AGD100000000).

**Note:** HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

K. oxytoca is a non-motile, Gram-negative, rod-shaped bacterium that causes frequent nosocomial infections of the urinary and respiratory tracts. It is ubiquitous in the environment and is often isolated from the skin, mucous membranes and intestines of humans and animals.\(^3\) Due to the extensive spread of antibiotic-resistant strains, especially of extended-spectrum β-lactamase (ESBL)-producing strains, there has been renewed interest in K. oxytoca infections.\(^4\)\(^5\)

K. oxytoca, strain MIT 10-5242 was deposited as an ampicillin-resistant strain that is negative for a cytotoxin that has been associated with hemorrhagic colitis.\(^1\)

**Material Provided:**

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

**Note:** If homogeneity is required for your intended use, please purify prior to initiating work.

**Packaging/Storage:**

HM-623 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: 35°C to 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 broth.
3. Use several drops of the suspension to inoculate an agar slant and/or plate.
4. Incubate the tube, slant and/or plate at 37°C for 24 hours.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: Klebsiella oxytoca, Strain MIT 10-5242, HM-623."

**Biosafety Level:** 2


**Disclaimers:**

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References:
1. Professor James G. Fox, personal communication.
2. HMP 9686 (Klebsiella oxytoca, strain MIT 10-5242)

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