**Proteus mirabilis, Strain WGLW4**

**Catalog No. HM-752**

For research use only. Not for use in humans.

**Contributors:**
Wendy S. Garrett, M.D., Ph.D., Assistant Professor, and Leslie H. Wardwell, Department of Immunology and Infectious Diseases, Harvard School of Public Health, Boston, Massachusetts, USA

**Manufacturer:**
BEI Resources

**Product Description:**
- **Bacteria Classification:** Morganellaceae, Proteus (previously classified as Enterobacteriaceae)
- **Species:** Proteus mirabilis
- **Strain:** WGLW4

**Original Source:** Proteus mirabilis (P. mirabilis), strain WGLW4 was isolated from human urine in Boston, Massachusetts, USA.

**Comments:** P. mirabilis, strain WGLW4 (HMP ID 1310) 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 P. mirabilis, strain WGLW4 was sequenced at the Broad Institute (GenBank: AMGU00000000).

**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.

**P. mirabilis** is a Gram-negative, dimorphic, highly motile enterobacterium that is a frequent cause of urinary tract infections in patients with long-term indwelling catheters or with compromised (e.g., injured or abnormal) urinary tracts. Typical virulence factors are associated with adhesion, motility, immunoneutralization, nutrient acquisition, host damage, as well as biofilm formation. P. mirabilis has a unique ability to differentiate between short, vegetative cells and elongated, hyperflagellated, swarmer cells. Due to increasing drug resistance and severe complications in infection, there has been renewed interest in P. mirabilis vaccine development. Several complete genomic sequences are now available.

**Material Provided:**
Each vial contains approximately 0.5 mL of bacterial culture in Nutrient broth supplemented with 10% glycerol.

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

**Packaging/Storage:**
HM-752 was packaged aseptically in 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:** Nutrient broth or Luria-Burtoni (LB) broth or equivalent
- **Nutrient agar or 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 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 1 day.

**Citation:**
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: Proteus mirabilis, Strain WGLW4, HM-752.”

**Biosafety Level:** 2


**Disclaimers:**
You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

**Use Restrictions:**
- This material is distributed for internal research, non-commercial purposes only. This material, its product

BEI Resources
www.beiresources.org

© 2014/2017/2021 American Type Culture Collection (ATCC). All rights reserved.

Page 1 of 2

HM-752_01DEC2021
or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:
6. HMP ID 1310 (Proteus mirabilis, strain WGLW4)

ATCC® is a trademark of the American Type Culture Collection.