**Product Sheet**

**Pseudomonas protegens**

(**ATCC® BAA-477™**)  

**Please read this FIRST**  

**Description**  

**Designation:** Pf-5  
**Deposited Name:** *Pseudomonas fluorescens* Migula  
**Product Description:** Genome sequencing strain. Biological control agent that suppresses a number of plant diseases caused by soil fungi. Produces hydrogen cyanide, pyocochelin, pyoluteorin, 2,4-diacetylphloroglucinol, pyoverdine, and pyomolin.

**Propagation**  

**Medium**  

ATCC® Medium 18: Trypticase Soy Agar/Broth  

**Growth Conditions**  

**Temperature:** 30°C  

**Atmosphere:** Aerobic

**Propagation Procedure**  

1. Open vial according to enclosed instructions.  
2. Using a single tube of #18 broth (5 to 6 mL), withdraw approximately 0.5 to 1.0 mL with a Pasteur or 1.0 mL pipette. Rehydrate the entire pellet.  
3. Aseptically transfer this aliquot back into the broth tube. Mix well.  
4. Use several drops of the suspension to inoculate a #18 agar slant and/or plate.  
5. Incubate the tubes and plate at 30°C for 24 to 48 hours.

**Notes**

Colony sectoring and the presence of multiple colony morphologies in cultures of *Pseudomonas* spp. have perplexed scientists for decades, but it is now clear that some (or maybe most) of the colonies with these characteristics have mutations in the *gacA* or *apdA* (=*lemA*) genes. GacA- or ApdA- mutants typically are deficient in extracellular protease production or tryptophan side chain oxidase activity whereas the wild type Pf-5 produces these enzymes. Therefore, we recommend that you select a colony that produces these enzymes to store as a stock culture for future experiments in your laboratory. References listed below provide information on the *gacA* and *apdA* genes and methods for assessing phenotypes described herein.


Purified genomic DNA of this strain is available as ATCC® BAA-477D-5 and BAA-477D.  

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

**References**

References and other information relating to this product are available online at [www.atcc.org](http://www.atcc.org).

**Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the current publication of the *Biosafety in Microbiological and Biomedical Laboratories* from the U.S. Department of Health and Human Services Centers for Disease Control and Prevention and National Institutes for Health.

**ATCC Warranty**

ATCC® products are warranted for 30 days from the date of shipment, and this warranty is valid only if the product is stored and handled according to the information included on this product information sheet. If the ATCC® product is a living cell or microorganism, ATCC lists the media formulation that has been found to be effective for this product. While other, unspecified media may also produce satisfactory results, a change in media or the absence of an additive from the ATCC recommended media may affect recovery, growth and/or function of this product. If an alternative medium formulation is used, the ATCC warranty for viability is no longer valid.
Disclaimers

This product is intended for laboratory research purposes only. It is not intended for use in humans. While ATCC uses reasonable efforts to include accurate and up-to-date information on this product sheet, ATCC makes no warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. ATCC does not warrant 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, and use. ATCC is not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to insure authenticity and reliability of materials on deposit, ATCC is not liable for damages arising from the misidentification or misrepresentation of such materials.

Please see the enclosed Material Transfer Agreement (MTA) for further details regarding the use of this product. The MTA is also available on our Web site at www.atcc.org

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

© ATCC 2020. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [03/10]