



Product Sheet

## **Pneumococcal Polysaccharide Powder**

### **Type 4 (US Type 4) (ATCC® 176-X™)**

Please read this **FIRST**



#### **Intended Use**

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

#### **Citation of Strain**

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Pneumococcal Polysaccharide Powder Type 4 (US Type 4) (ATCC® 176-X™)*

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor

#### **Description**

**Antigenic Properties:** Type 4 (Danish designation 4)

##### **Product Description:**

Purified pneumococcal polysaccharides are manufactured by Merck & Company for small quantity distribution by ATCC. The pneumococcal powders include those types which are components of the current 23-valent vaccine against *Streptococcus pneumoniae*.

Each of the polysaccharide antigens used in the polyvalent vaccine is extracted and purified separately. These vaccine products can be used to assay for type-specific antibodies, research immune responses and study immunodeficiencies.

#### **Propagation**

##### **Method for Resuspension**

1. Prepare a 2 mg/mL pneumococcal polysaccharide stock solution by adding 1 mL of pyrogen-free distilled water to 2 mg of pneumococcal polysaccharide.
2. Incubate the suspension overnight at 2-8°C with gentle stirring on a stir plate to dissolve the polysaccharide.
3. Aliquot the polysaccharide solution and store the aliquots containing the stock solution at -60°C to -80°C.

#### **Notes**

Stock solution can be diluted to a working concentration in the buffer of the researcher's choice.

Storage of Powder: Store at -10°C or colder.

Storage of Reconstituted Material: Store at -60°C to -80°C.

Quantities available: (See Web site for current prices)

2 mg  
10 mg  
200 mg

Pneumococcal polysaccharide powders are manufactured by Merck and Company. They are **NOT** sterile products. Antigenicity is verified by Merck.

No Certificate of Analysis is available for this product.

#### **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



Product Sheet

***Pneumococcal  
Polysaccharide Powder  
Type 4 (US Type 4) (ATCC®  
176-X™)***

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](http://www.atcc.org)

Additional information on this culture is available on the ATCC web site at [www.atcc.org](http://www.atcc.org).

© ATCC 2013. All rights reserved. ATCC is a registered trademark of the American Type Culture Collection. [05/23]

---

**Please read this FIRST**



---

**Intended Use**

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

---

**Citation of Strain**

If use of this culture results in a scientific publication, it should be cited in that manuscript in the following manner: *Pneumococcal Polysaccharide Powder Type 4 (US Type 4) (ATCC® 176-X™)*

American Type Culture Collection  
PO Box 1549  
Manassas, VA 20108 USA  
[www.atcc.org](http://www.atcc.org)

800.638.6597 or 703.365.2700  
Fax: 703.365.2750  
Email: [Tech@atcc.org](mailto:Tech@atcc.org)

Or contact your local distributor