**Product Description**

Before submitting an order you will be asked to read and accept the terms and conditions of ATCC’s Material Transfer Agreement or, in certain cases, an MTA specified by the depositing institution.

Customers in Europe, Australia, Hong Kong, India, Japan, Korea, New Zealand, Singapore and Taiwan, R.O.C. must contact a local distributor for pricing information and to place an order for ATCC cultures and products.

### Cell Lines

<table>
<thead>
<tr>
<th>ATCC® Number: CRL-1721™</th>
<th>Price: $203.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designations: PC-12</td>
<td>Depositors: B Patterson</td>
</tr>
<tr>
<td>Biosafety Level: 1</td>
<td>Shipped: frozen</td>
</tr>
<tr>
<td>Medium &amp; Serum: See Propagation</td>
<td>Growth Properties: loosely adherent, multicell aggregates</td>
</tr>
<tr>
<td>Organism: <em>Rattus norvegicus</em> (rat)</td>
<td></td>
</tr>
<tr>
<td>Source: Organ: adrenal gland</td>
<td>Disease: pheochromocytoma</td>
</tr>
<tr>
<td>Cellular Products: catecholamines; dopamine; norepinephrine [1163]</td>
<td></td>
</tr>
<tr>
<td>Permits/Forms: In addition to the MTA mentioned above, other ATCC and/or regulatory permits may be required for the transfer of this ATCC material. Anyone purchasing ATCC material is ultimately responsible for obtaining the permits. Please click here for information regarding the specific requirements for shipment to your location.</td>
<td></td>
</tr>
</tbody>
</table>

### Related Cell Culture Products

- **Receptors:** nerve growth factor (NGF), expressed
- **Tumorigenic:** Yes, in New England Deaconess Hospital strain rats
- **Cytogenetic Analysis:** 40 chromosomes; 38 autosomes plus XY
- **Gender:** male
- **Comments:** The PC-12 cell line was derived from a transplantable rat pheochromocytoma. [1163] The cells respond reversibly to NGF by induction of the neuronal phenotype. [1163] The cells do not synthesize epinephrine. [1163]

### Propagation

**ATCC complete growth medium:** Ham’s F12K medium with 2 mM L-glutamine adjusted to contain 1.5 g/L sodium bicarbonate, 82.5%; horse serum, 15%; fetal bovine serum, 2.5%

**Temperature:** 37.0°C  
**Atmosphere:** air, 95%; carbon dioxide (CO2), 5%

### Subculturing

**Protocol:** Remove cells from substrate by pipetting over the cell sheet with fresh medium, by striking flask or by scraping. Aspirate cells in fresh medium with a small bore pipette to break up clusters. Add fresh culture medium, aspirate and dispense into new culture flasks. Note: PC-12 adheres poorly to plastic, and tends to grow in small clusters.

**Subcultivation ratio:** A subcultivation ratio of 1:4 is recommended

**Medium renewal:** Every 2 to 3 days

### Preservation

**Freeze medium:** Complete growth medium supplemented with 5% (v/v) DMSO  
**Storage temperature:** liquid nitrogen vapor phase

### Doubling Time

92 hrs

### Related Products

- **Recommended medium (without the additional supplements or serum described under ATCC Medium): ATCC 30-2004**  
- **recommended serum: ATCC 30-2020**
- **recommended serum: ATCC 30-2040**

### References

- [1163]: Greene LA , Tischler AS . Establishment of a noradrenergic clonal line of rat adrenal pheochromocytoma cells


Notices and Disclaimers

ATCC products are intended for laboratory research purposes only. They are not intended for use in humans.

While ATCC uses reasonable efforts to include accurate and up-to-date information on this site, 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.

All prices are listed in U.S. dollars and are subject to change without notice. A discount off the current list price will be applied to most cultures for nonprofit institutions in the United States and Canada. Cultures that are ordered as test tubes or flasks will carry an additional laboratory fee. Fees for permits, shipping, and handling may apply.

You may continue your word search in Cell Biology selections by typing in your search criteria below or returning to the Cell Biology menu. To search another product line, choose one from the dropdown box at the top. For complex searches using boolean operators, the following characters must be used: & (for AND), | (for OR), ^ (for AND NOT). An asterisk (*) is used as the wildcard. For more information please review the Search Help.

PC-12  Word Search  Clear Search

Home Page Archive

Home  Ordering Info  Quick Order  Support  About ATCC  Contact Us
Privacy Policy  Terms of Use  ATCC MTA

© 2006 American Type Culture Collection (ATCC).
All rights reserved.