### Recombinant Human Interleukin–21 (IL–21)

**Catalog Number:**
- PHC0214
- PHC0215
- PHC0211
- PHC0213

**Quantity:**
- 10 μg
- 25 μg
- 100 μg
- 1 mg

**Lot Number:**
See product label.

**Molecular Weight:**
~15 kDa

**Purity:**
>95% as determined by SDS-PAGE analysis.

**Amino Acid Sequence:**
QDRHMIRMQRQ DIVDQLKNYVNDLVPEFLPAPEDVETNCW filters SFSEAFSCFQKALKSANTGNNERIINVSIIKLKRKPSPTNAGRRQKHLTCPSCDSYEKKPPKEFLERFKSLIQKMIHQHLSSRTHGSED

**Biological Activity:**
ED50 range = 1.0–5.0 ng/mL (Specific Activity: 1.0 x 10^6–2.0 x 10^5 units/mg), determined by the dose-dependent secretion of Interferon gamma by human natural killer lymphoma NK–92 cells. The optimal concentration for each specific application should be determined by an initial dose-response assay.

**Formulation:**
Lyophilized, carrier free.

**Sterility:**
Filtered prior to lyophilization through 0.22 micron sterile filter.

**Endotoxin:**
<0.1 ng/μg

**Production:**
Recombinant human IL–21 is produced in *E. coli* and purified via sequential chromatography.

**Reconstitution Recommendation:**
We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute lyophilized recombinant human IL–21 in sterile, distilled water to a concentration of 0.1–1.0 mg/mL. Further dilutions should be made in low endotoxin medium or a buffered solution containing a carrier protein such as heat inactivated FCS or tissue culture grade BSA.

**Suggested Working Dilutions:**
The optimal concentration should be determined for each specific application.

**Storage:**
Store lyophilized recombinant human IL–21 at 2°C to 8°C, preferably desiccated. Upon reconstitution, apportion into working aliquots and store at ≤ –20°C. Avoid repeated freeze/thaw cycles.

**Expiration Date:**
Expires one year from date of receipt when stored as instructed.

**References:**
Explanation of Symbols
The symbols present on the product label are explained below:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>REF</td>
<td>Catalog Number</td>
</tr>
<tr>
<td>RUO</td>
<td>Research Use Only</td>
</tr>
<tr>
<td>�硁</td>
<td>Use by</td>
</tr>
<tr>
<td>⚜️</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>[-]</td>
<td>Without, does not contain</td>
</tr>
<tr>
<td>🔴</td>
<td>Protect from light</td>
</tr>
<tr>
<td>📖</td>
<td>Directs the user to consult instructions for use (IFU), accompanying the product.</td>
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</tbody>
</table>

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<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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<tbody>
<tr>
<td>LOT</td>
<td>Batch code</td>
</tr>
<tr>
<td>IVD</td>
<td>In vitro diagnostic medical device</td>
</tr>
<tr>
<td>⬇️</td>
<td>Temperature limitation</td>
</tr>
<tr>
<td>ECREP</td>
<td>European Community authorized representative</td>
</tr>
<tr>
<td>[+ ]</td>
<td>With, contains</td>
</tr>
<tr>
<td>⚠️</td>
<td>Consult accompanying documents</td>
</tr>
</tbody>
</table>

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