Product Data Sheet

Recombinant Human Growth Hormone
Catalog Number: 100-40

Product Description

Alternate Names: Somatotropin
Accession Number: P01241

Description: Growth hormone (GH) is an important mitogenic growth factor that is synthesized, stored, and secreted by somatotropic cells of the anterior pituitary gland. GH stimulates growth, cell reproduction, and cell regeneration. In children, GH deficiencies can cause short stature, growth failure, and delayed sexual maturity. Adult GH deficiency presents with reduced lean body mass, increased adiposity, reduced muscle strength, and ultimately premature mortality. GH replacement therapy is used to treat many growth disorders, including Turner syndrome, chronic renal failure, and Prader–Willi syndrome.

Source: Genetically modified E.coli.

Predicted MW: Monomer, 22.3 kDa (with 192 amino acids)

AA Sequence: MFPTIPLSRL FDNALRAHR LHQLADTYQ EFEEAYIPKE QKYSFLQNPQ TSLCFSESIP TPSNREETQQ KSNLEEJR LLLIQSWLQP VQFLRSVFAN SLVYGASDSN VYDLLKDLEE GIQTLMGRLE DGSRTGQIF KQYSKFDTN SHNADALLKN YGLLYCFR KDMDKVETFLRI VQCRSVEGSC GF

Formulation: Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 20 mM sodium bicarbonate, pH 8.0

Product Specifications*

*Lot-specific values for the following specifications are supplied with each production lot on its corresponding COA.

<table>
<thead>
<tr>
<th>Specification</th>
<th>Method of Determination</th>
<th>Acceptance Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purity</td>
<td>Reducing and Non-Reducing SDS-PAGE</td>
<td>≥ 95%</td>
</tr>
<tr>
<td>Endotoxin</td>
<td>Kinetic LAL (50% confidence)</td>
<td>≤ 1 EU/µg</td>
</tr>
</tbody>
</table>

In addition to the acceptance criteria, this product has been tested with the following assay: (1) PDF 9D11 cell proliferation (typical ED50 is 1-15 ng/mL)

Product Preparation and Storage

Country of Origin: USA  Shipping: Room temperature

Product Reconstitution: Sterile water at 0.1 mg/mL

Instructions: Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws.

Expiration Date:
12 months from date of receipt when stored at -20°C to -80°C as supplied.
1 month when stored at 4°C after reconstituting as directed.
3 months when stored at -20°C to -80°C after reconstituting as directed.

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!