

**PrimeGene™** Recombinant Human Insulin-like Growth Factor-2  
a biotechnne brand (rHuIGF-2)

**PrimeGene Technical Data Sheet**

|                                 |  |
|---------------------------------|--|
| <b>Catalog Number:</b>          | 105-02   |
| <b>Source:</b>                  | <i>Escherichia coli</i> .  |
| <b>Molecular Weight:</b>        | Approximately 7.5 kDa, a single non-glycosylated polypeptide chain containing 67 amino acids.  |
| <b>Quantity:</b>                | 10µg/50µg/1000µg   |
| <b>AA Sequence:</b>             | AYRPSETLCG GELVDTLQFV CGDRGFYFSR PASRVSRRSR GIVEECCFRS CDLALLETYC<br>ATPAKSE   |
| <b>Purity:</b>                  | > 98 % by SDS-PAGE and HPLC analyses.  |
| <b>Biological Activity:</b>     | Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using serum free human MCF-7 cells is less than 2 ng/ml, corresponding to a specific activity of > 5.0 × 10 <sup>5</sup> IU/mg.  |
| <b>Physical Appearance:</b>     | Sterile Filtered White lyophilized (freeze-dried) powder.  |
| <b>Formulation:</b>             | Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris-HCl, pH 8.0, 150 mM NaCl, with 0.02 % Tween-20.   |
| <b>Endotoxin:</b>               | Less than 1 EU/µg of rHuIGF-2 as determined by LAL method.   |
| <b>Reconstitution:</b>          | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| <b>Shipping:</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  |
| <b>Stability &amp; Storage:</b> | <b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>                                 |
| <b>Usage:</b>                   | This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>   |

***Human Insulin-like Growth Factor-2***

Insulin-like growth factor (IGF)-I (also known as somatomedin C and somatomedin A) and IGF-II (multiplication stimulating activity or MSA) belong to the family of insulin-like growth factors that are structurally homologous to proinsulin. Mature IGF-I and IGF-II share approximately 70% sequence identity. Both IGF-I and IGF-II are expressed in many tissues and cell types and may have autocrine, paracrine and endocrine functions. Mature IGF-I and IGF-II are highly conserved between the human, bovine and porcine proteins (100% identity), and exhibit cross-species activity.

The IGFL (insulin-like growth factor-like) family includes four small (~11 kDa), probably secreted family members in humans and one in mouse. This family shares A and B chain cysteine motifs with the IGF superfamily, and has an additional cysteine motif within an uncleaved region corresponding to the C peptide of the IGF family.

**Shanghai PrimeGene Bio-Tech Co., Ltd.**

Website: [www.primegene.com.cn](http://www.primegene.com.cn)  
Tel: +86 21 52380373

Website: [www.primegene.com](http://www.primegene.com)  
Fax: +86 21 61077348

Rev. 08/20/2018 V.3

Email: [info.pg@bio-techne.com](mailto:info.pg@bio-techne.com)