

## Human IGF-I (Receptor Grade)

### Description

Human insulin-like growth factor-I (IGF-I) is a single chain 70 amino acid polypeptide that shares structural homology with insulin and human IGF-II. IGF-I plays a critical role in growth, differentiation and development via autocrine, paracrine and endocrine mechanisms. It is a mitogen and also has effects on cell migration and differentiation. IGF-I binds to the type I IGF receptor and most of its actions are probably mediated through inducing signal transduction via this receptor. IGF-I also binds to each of the six IGF binding proteins (IGFBPs). This binding also regulates the biological function of IGF-I. IGF-I is highly conserved across species which suggests an important role for the peptide. Human IGF-I is present in high concentrations in normal adult human serum in a complex with IGFBP-3 and the acid-labile subunit (ALS) and mediates many of the actions of Growth Hormone. IGF-I is a regulator of metabolism and is also implicated in the pathophysiology of cancer, diabetes and obesity.

### References

Humbel RE (1990) European Journal of Biochemistry **190**, 445-462  
Stewart CEH and Rotwein P (1996) Physiological Reviews **76**, 1005-1026  
Butler AA and Le Roith D (2001) Annual Review of Physiology **63**, 141-164

<b>Source:</b>	Produced in <i>E.coli</i> .
<b>Molecular Weight:</b>	7649 ± 2 Daltons
<b>Purity:</b>	≥ 95 % (by HPLC analysis)
<b>N-terminal sequence:</b>	Analysis of 5 residues
<b>Biological Activity:</b>	Proliferation of Chinese hamster ovary (CHO) cells (EC <sub>50</sub> < 350 ng/ml)
<b>Endotoxin:</b>	≤ 0.1 EU/μg
<b>Appearance:</b>	White powder freeze-dried from 0.1M acetic acid and stored under nitrogen at a slight vacuum.
<b>Storage/Stability:</b>	At least 2 years at 2-8°C (as a freeze dried product).
<b>Reconstitution:</b>	<i>Handling of GroPep IGF-I, IGF-II and IGF analogues</i>

GroPep Bioreagents Pty Ltd  
40-46 West Thebarton Road  
Thebarton SA 5031  
Australia

ABN 93 147 032 166

Telephone: +61 8 8152 9360  
Fax: +61 8 8152 9475

WDSP-02.03

Postal Address:  
PO Box 10065  
Adelaide Business Centre  
SA 5000  
Australia

Email:  
[info@gropep.com](mailto:info@gropep.com)

Internet:  
[www.gropep.com](http://www.gropep.com)



# GroPep Bioreagents

## Product Codes and Pricing

<b>Human IGF-I (RG)</b>	<b>20 µg</b>	<b>CU020</b>	<b>US\$100</b>
	<b>100 µg</b>	<b>CU100</b>	<b>US\$200</b>
	<b>1 mg</b>	<b>CM001</b>	<b>US\$800</b>
	<b>5 mg</b>	<b>CM005</b>	<b>US\$3000</b>

## Related Products:

Biotinyl human IGF-I  
Human IGF-I (Media Grade)  
Human IGF-I antiserum (Rabbit)  
Human IGF-I monoclonal antibody  
Human IGF-II (Receptor Grade)

**\*\*NOT FOR USE IN HUMANS\*\***

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[www.gropep.com](http://www.gropep.com)