



# GroPep Bioreagents

## Human IGF-II (Media Grade)

### Description

Human insulin-like growth factor-II (IGF-II) is a single chain 67 amino acid polypeptide that shares structural homology with insulin and human IGF-I. IGF-II plays a critical role in embryonic and foetal development via autocrine, paracrine and endocrine mechanisms. It is a mitogen and also has effects on cell migration and differentiation. IGF-II binds to the type I IGF receptor and the IGF-II/cation-independent mannose-6-phosphate receptor. Its actions are probably mediated through inducing signal transduction via one or both of these receptors. IGF-II also binds to each of the six IGF binding proteins (IGFBPs). This binding also regulates the biological function of IGF-II. IGF-II is highly conserved across species which suggests an important role for the peptide. Human IGF-II is present in high concentrations in normal adult human serum, although the function of this is unknown. IGF-II is also implicated in the pathophysiology of cancer, diabetes and obesity.

**Media grade human IGF-II is a high quality reagent at an economical cost to enable studies where higher quantities of peptide are required.**

### References

Humbel RE (1990) European Journal of Biochemistry **190**, 445-462;  
Stewart CEH & Rotwein P (1996) Physiological Reviews **76**, 1005-1026

### Source:

Produced in *E.coli*.

### Molecular Weight:

7469 ± 2 Daltons

### Purity:

≥ 85 % (by HPLC analysis)  
(Other species are micro heterogeneous forms which have biological activity)

### N-terminal sequence:

Analysis of 5 residues

### Biological Activity:

Proliferation of Chinese hamster ovary (CHO) cells  
(EC<sub>50</sub> ≤ 150 ng/ml)

### Endotoxin:

≤ 0.1 EU/μg

### Appearance:

White powder freeze-dried from 0.1M acetic acid and stored under nitrogen at a slight vacuum.

### Storage/Stability:

At least 2 years at 2-8°C (as a freeze dried product).

### Reconstitution:

*Handling of GroPep IGF-I, IGF-II and IGF analogues*

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## Product Codes

<b>Human IGF-II (MG)</b>	<b>100 µg</b>	<b>OU100</b>
	<b>1 mg</b>	<b>OM001</b>

## Related Products:

Mono-biotinyl human IGF-II (Receptor Grade)  
Di-biotinyl human IGF-II (Receptor Grade)  
Human IGF-II (Receptor Grade)  
Human IGF-II antiserum (Rabbit)  
[Leu<sup>27</sup>] IGF-II  
Human pro-IGF-II (aa 1-156)  
Human pro-IGF-II (aa 1-104)

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

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