



GroPep® Bioreagents

Human IGF-II (Receptor 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.

References

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

Source:

Produced in *E.coli*.

Molecular Weight:

7469 ± 2 Daltons

Purity:

≥ 95 % (by HPLC analysis)

N-terminal sequence:

Analysis of 5 residues

Biological Activity:

Proliferation of Chinese hamster ovary (CHO) cells
(EC₅₀ ≤ 30 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

Human IGF-II (RG)	20 µg	FU020
	100 µg	FU100
	1 mg	FM001

Related Products:

Mono-biotinyl human IGF-II (Receptor Grade)
Di-biotinyl human IGF-II (Receptor Grade)
Human IGF-II (Media Grade)
Human IGF-II antiserum (Rabbit)
[Leu²⁷] 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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