



GroPep Bioreagents

Human [Arg³] IGF-I (Receptor Grade)

Description

Human [Arg³] insulin-like Growth Factor-I (IGF-I) is a 70 amino acid analogue of IGF-I comprising the complete human IGF-I sequence with the substitution of an Arginine for the Glutamine at position 3. Human [Arg³] IGF-I is more potent than IGF-I *in vitro* and *in vivo*. This increased potency is due to reduced binding of human [Arg³] IGF-I to most of the IGF binding proteins which modify the biological actions of IGF-I. Human [Arg³] IGF-I binds to the type 1 IGF receptor with similar affinity to wild type IGF-I. This is a high quality research reagent for use in studies on cell growth, IGF receptors and IGF binding proteins.

Human [Arg³] IGF-I is offered to customers who prefer a full length IGF-I rather than the truncated Human Des [1-3] IGF-I which has similar properties.

References

King R *et al* (1992) *Journal of Molecular Endocrinology* **8**, 29-41
Francis GL *et al* (1993) *Biochemical Journal* **293**, 713-719

Source:

Produced in *E.coli*.

Molecular Weight:

7676 daltons

Purity:

>95 % (by HPLC analysis)

N-terminal sequence:

Analysis of 5 residues

Biological Activity:

Stimulation of protein synthesis in rat L6 myoblasts
(ED₅₀ < 10 ng/ml)
IGF type 1 receptor binding assay (ED₅₀ < 10 ng/ml)
IGF binding protein assay: ED₅₀ > 50 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 2-4°C (as a freeze dried product).

Reconstitution:

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

Detection:

Procedure for the Iodination of IGFs
Determination of IGF-I or IGF-II in a range of species by Radioimmunoassay (RIA)

Product Codes and Pricing

Human [Arg ³] IGF-I	100 μg	EU100
	1 mg	EM001

Related Products:

Human IGF-I (Receptor Grade)
LR³IGF-I (Receptor grade)
Human Des [1-3] IGF-I (Receptor Grade)
Human [Arg³] IGF-I (Media Grade)

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

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