

Human [Leu²⁴] [Ala³¹] IGF-I

Description

Human [Leu²⁴][Ala³¹]insulin-like Growth Factor-I ([Leu²⁴][Ala³¹]IGF-I) is an analogue of human IGF-I which has an Leucine substitution in place of Tyrosine at position 24 and an Alanine substitution in place of Tyrosine at position 31 of the human IGF-I sequence. [Leu²⁴][Ala³¹]IGF-I has greatly reduced binding to the type 1 IGF receptor and to the insulin receptor compared to IGF-I, [Leu²⁴] IGF-I and [Leu⁶⁰] IGF-I. However [Leu²⁴] [Ala³¹] IGF-I has normal binding to acid-stripped human serum binding proteins. Consequently [Leu²⁴] [Ala³¹] IGF-I is an extremely useful analogue of IGF-I for investigating IGF actions independent of binding to the type 1 IGF receptor

References

Bayne ML *et al* (1990) Journal of Biological Chemistry **265**, 15648-15652
Forbes BE *et al* (2002) European Journal of Biochemistry **269**, 961-968

Source:

Produced in *E.coli*.

Molecular Weight:

7507 daltons

Purity:

>95 % (by HPLC analysis)

N-terminal sequence:

Analysis of 5 residues

Biological Activity:

IGF type 1 receptor binding assay: (ED₅₀ > 50 ng/ml)

IGF binding protein assay: (ED₅₀ < 10 ng/ml)

Stimulation of protein synthesis in rat L6 myoblasts:

(ED₅₀ > 2000 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

Product Codes:

Human [Leu²⁴] [Ala³¹] IGF-I 20 μg ADU020

Related Products:

Human [Ala³¹] IGF-I

Human [Leu²⁴] IGF-I

Human [Leu⁶⁰] IGF-I

Human [Ala³¹] [Leu⁶⁰] IGF-I

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

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