

## Human Pro-IGF-II (aa 1-156)

### Description

The IGF-II gene encodes a single transcript which results in a 156 amino acid protein, including an 89 amino acid E-domain. Pro-IGF-II is converted to mature IGF-II by sequential cleavage at amino acids 104, 87 and 67. Pro-IGF-II contains sites of O-linked glycosylation. Differential glycosylation and cleavage within the E-domain can therefore result in multiple pro-IGF-II isoforms. The pro-IGF-II proteins make up 10-20% of circulating IGF-II. Pro-IGF-II proteins are secreted by some tumour cell lines and levels are elevated in non-islet cell tumour hypoglycaemia.

### Reference

Duguay SJ *et al* (1998) Journal of Biological Chemistry **273**, 18443-18451  
Marks AG *et al* (2011) Endocrinology **152**, 922-930

### Source:

Produced in *E.coli*.

### Molecular Weight:

The final product contains three major isoforms of pro-IGF-II corresponding to molecular weights of 16.1, 17.0 and 17.6 kDa. These species correspond to the full length 156 amino acid protein and two smaller species corresponding to C-terminal truncations of approximately 5 and 15 residues which result from the purification process

### Purity:

>85 % (by HPLC analysis)

### N-terminal sequence:

Analysis of 5 residues

### Biological Activity:

Stimulation of protein synthesis in rat L6 myoblasts  
(ED<sub>50</sub> < 220 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 Western Ligand blotting using iodinated IGF-I or IGF-II*  
*Procedure for Western Ligand blotting using biotinylated IGF-I or IGF-II*

### Product Codes:

**Human Pro-IGF-II (1-156)**

**20 μg**

**AHU020**

### Related Products:

Human pro-IGF-II (aa 1-104)

Human IGF-IIe (aa 78 - 88) antiserum (Rabbit)

Human IGF-IIe (aa 89 - 101) antiserum (Rabbit)

Human IGF-IIe (aa 138 - 156) antiserum (Rabbit)

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

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