

Recombinant Chicken Insulin-Like Growth Factor II (rcIGF-II)

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. CTK-298
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➤ **Description :**

Recombinant Chicken IGF-II produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 66 amino acids and having a molecular mass of 7512 Dalton.

The rcIGF-II is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered White Lyophilized (freeze-dried) powder.

➤ **Formulation:**

The protein was lyophilized after extensive dialysis against 100mM acetic acid.

➤ **Solubility:**

It is recommended to reconstitute the lyophilized rcIGF-II in sterile 18MΩ-cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

➤ **Stability:**

Lyophilized rcIGF-II although stable at room temperature for 3 weeks, should be stored desiccated below -18 C. Upon reconstitution rcIGF-II should be stored at 4 C between 2-7 days and for future use below -18 C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please avoid freeze-thaw cycles.

➤ **Purity:**

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Anion-exchange FPLC.
- (c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel.

➤ **Dimers and aggregates:**

Less than 1% as determined by silver-stained SDS-PAGE gel analysis.

➤ **Biological Activity:**

This rcIGF-II is fully biologically active when compared to standards. The ED50, was calculated 2 methods:

1. Stimulation of protein synthesis in rat L6 myoblasts ED50 was found to be less than 150 ng/ml.
2. Type 1 IGF receptor binding assay ED50 was found to be less than 20 ng/ml.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of rcIGF-II.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm.
2. Analysis by RP-HPLC, using a standard solution of chicken IGF-II as a Reference Standard.

➤ **Usage:**

This material is offered for research, laboratory or further evaluation purposes.