

Recombinant Human Artemin - ART

Certificate of Analysis and Data Sheet

➤ Source: E.Coli	➤ Catalog No. CTK-306
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➤ **Description :**

Recombinant Human Artemin produced in E.Coli is a disulfide-linked homodimer, non-glycosylated, polypeptide chain containing 2 x 113 amino acids and having a total molecular mass of 24213 Daltons .

Artemin is purified by proprietary chromatographic techniques.

➤ **Physical Appearance:**

Sterile Filtered White lyophilized (freeze-dried) powder.

➤ **Formulation:**

Recombinant Artemin was lyophilized after extensive dialysis against 10mM sodium citrate pH-4.5 and 25mM sodium chloride.

➤ **Solubility:**

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

➤ **Stability:**

Lyophilized Human Artemin although stable at room temperature for 3 weeks, should be stored desiccated below -18 C. Upon reconstitution Murine C-10 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 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Anion-exchange FPLC.

(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained.

➤ **Amino-Acid Sequence :**

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Gly-Gly-Pro-Gly.

➤ **Dimers and aggregates:**

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

➤ **Biological Activity:**

This artemin is fully biologically active when compared to standard. The ED50, calculated by the dose-dependant proliferation assay SH-SY5Y cell line which was found to be 4-8ng/ml. The activity can also determined by it's ability to promote survival and neurite outgrowth.

➤ **Endotoxin:**

Less than 0.1 ng/μg (IEU/μg) of Human Artemin.

➤ **Protein content:**

Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm .
2. Analysis by RP-HPLC, using a calibrated solution of Artemin as a Reference Standard.

➤ **Usage:**

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