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# SCIENTIFIC

# Artemin Human

**Description:**Artemin Human Recombinant 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 24205 Dalton. Artemin is purified by proprietary chromatographic techniques.

Synonyms: ART, ARTN, EVN, NBN.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

**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.

**Purity:**Greater than 98.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

#### Formulation:

Artemin was lyophilized after extensive dialysis against 10mM sodium citrate pH-4.5 and 150mM sodium chloride.

#### Stability:

Lyophilized Artemin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Artemin Human Recombinant 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 prevent freeze-thaw cycles.

# Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

## Solubility:

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

#### Introduction:

The protein encoded by this gene is a member of the glial cell line-derived neurotophic factor (GDNF) family of ligands which are a group of ligands within the TGF-beta superfamily of signaling molecules. GDNFs are unique in having neurotrophic properties and have potential use for gene therapy in neurodegenrative disease. Artemin has been shown in culture to support the survival of a number of periferal neuron populations and at least one population of dopaminergic CNS neurons. Its role in the PNS and CNS is further substantiated by its expression pattern in the proximity of these neurons. This protein is a ligand for the RET receptor and uses GFR-alpha 3 as a coreceptor. Four alternatively spliced transcripts have been described, two of which encode the same protein.

### **Biological Activity:**

The Biological activity is calculated by it's ability to promote survival and neurite outgrowth and dorsal root ganglion neurons.









Catalog #:CYPS-313

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