



Product Datasheet

Product Name	Artemin Human Recombinant
Cata No	CB500208
Source	<i>Escherichia Coli.</i>
Synonyms	ART, ARTN , EVN, NBN.

Description

The protein encoded by this gene is a member of the glial cell line-derived neurotrophic 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 neurodegenerative disease. Artemin has been shown in culture to support the survival of a number of peripheral 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. 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.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

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

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.

Sequence

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

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