

BACKGROUND

Artemin is a novel member of the glial cell line-derived neurotrophic factor (GDNF) ligand family. Current evidence suggests that Artemin signals through the receptor complex, GFR α 3-RET, to influence neuron survival in vitro and in vivo.

Recombinant human Artemin is a non-glycosylated, disulfide-linked homodimer, containing two 113 amino acids and having a total molecular mass of 24.2 kDa.

Alternative Names:

ARTN, enovin, neublartin

Amino Acid Sequence:

AGGPGSRARA AGARGCRLRS QLVVPRALGL GHRSDLVRF
RFCSGSCRRA RSPHDLAS LLAGALRPP PGSRPVSQPC
CRPTRYEAVS FMDVNSTWRT VDRLSATACG CLG

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

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

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by the dose-dependant proliferation of the SH-SY5Y cell line and is typically 4-8 ng/mL. The activity can also be determined by its ability to promote survival and neurite outgrowth.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

