

Artemin Human E. coli

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: E. coli	RBG10067005	(5 µg)
Species: Human	RBG10067020	(20 µg)
	RBG10067100	(100 µg)

Description

Artemin is a disulfide-linked homodimeric neurotrophic factor structurally related to GDNF, Artemin, Neurturin and Persephin. These proteins belong to the cysteine knot superfamily of growth factors that assume stable dimeric protein structures. Artemin, GDNF, Persephin and Neurturin all signal through a multicomponent receptor system, composed of RET (receptor tyrosine kinase) and one of the four GFRalpha (alpha1-alpha4) receptors. Artemin prefers the receptor GFRalpha3-RET, but will use other receptors as an alternative. Artemin supports the survival of all peripheral ganglia, such as sympathetic, neural crest and placodally-derived sensory neurons, and dopaminergic midbrain neurons. The functional human Artemin ligand is a disulfide-linked homodimer of two 12.0 kDa polypeptide monomers. Each monomer contains seven conserved cysteine residues, one of which is used for interchain disulfide bridging and the others are involved in intramolecular ring formation known as the cysteine knot configuration. Recombinant Human Artemin is a 24.2 kDa, disulfide-linked homodimer formed by two identical 113 amino acid subunits.

Amino Acid Sequence

AGGPGSRARA AGARGCRLRS QLVPVRLGL GHRSEDLVRF RFCSGSCRRR RSPHDLASLLS LLGAGALRPP PGSRPVSQPC
CRPTRYEAVS FMDVNSTWRT VDRLSATAACG CLG

Source

E. coli

Purity

98%

Biological Activity

Determined by its ability to promote survival and neurite outgrowth and dorsal root ganglion neurons.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-0.5 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C

Storage, Stability/Shelf Life

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