



Recombinant Mouse Artemin

20200309DS



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	M10-129S
Size:	5 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	11876
Synonyms:	ART, ARTN, Enovin, Neublastin

Artemin is a disulfide-linked homodimeric neurotrophic factor structurally related to GDNF, 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 GFR α (α 1- α 4) receptors. Artemin prefers the receptor GFR α 3-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 Murine Artemin is a disulfide-linked homodimer formed by two identical 113 amino acid subunits with a calculated molecular weight of 24.2 kDa.

Sequence

```
AGTRSSRART TDARGCRLRS QLVVVSALGL GHSSDELIRF  
RFCSGSCRRA RSQHDLSLAS LLGAGALRSP PGSRPISQPC  
CRPTRYEAVS FMDVNSTWRT VDHLSATACG CLG
```

Database References

Protein RefSeq:	NP_001271120.1
Uniprot ID:	Q9Z0L2
mRNA RefSeq:	NM_001284191.1

Product Specifications

Expressed in	E.coli
Purity	≥ 97% by SDS-PAGE gel and HPLC analyses.
Endotoxin level	< 0.1 ng/µg of protein (<1EU/µg)
Formulation	lyophilized
Length (aa):	113
MW:	24.2 kDa



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Determined by the dose-dependent stimulation of the proliferation of SH-SY5Y cells. The expected ED₅₀ for this effect is 0.1-0.5 µg/ml.