

## 32-8884: Recombinant Human Artemin

**Gene :** ARTN  
**Gene ID :** 9048  
**Uniprot ID :** Q5T4W7

### Description

Source: E. coli.  
MW :12.1kD.

Recombinant Human Artemin is produced by our E.coli expression system and the target gene encoding Ala108-Gly220 is expressed. Human Artemin is a GDNF family ligand that is distantly related to the TGF- beta superfamily of molecules. It is synthesized as a preproprotein, and contains a variable length pre-, or signal sequence, plus a 68 amino acid (aa) proregion and a 113 aa mature segment. Alternate splicing and start sites create signal sequences of 22, 30 and 39 aa, respectively. Following synthesis and proteolytic processing, mature ARTN is secreted as a presumably glycosylated, 28 kDa disulfide-linked homodimer that contains three intrachain disulfide bonds and the typical TGF- beta signature cysteine-knot motif. In the mature region, human ARTN is 89% and 88% aa identical to rat and mouse ARTN, respectively. Human ARTN is active on rodent cells. The receptor for ARTN has been identified as the ligand binding subunit GFRa-3 plus the signal transducing subunit, RET. The GFRa-1/RET receptor complex has also been suggested to be a ligand binding unit or ARTN. ARTN is known to be a chemoattractant for sympathetic neuron axons innervating the developing cardiovascular system. It also promotes sensory neuron survival and likely plays a role in the development of the peripheral nervous system. Finally, it has been reported to reverse neuropathic pain due to nerve injury, and to help resolve morphological changes associated with nerve damage.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 4mM HCl.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** GSAGGPGSRARAAGARGCRLRSQVLPVRLGLGHRSEDLVRFRCGSGCRRARSPHDLSLASLLGAGALRPPP  
GSRPVSQCCRPTRYEAVSFMDVNSTWRTVDRLSATACGLG\*

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.