

DATASHEET
Version 20181206**CNTF, Rat****Cat. No.:** Z03313-1**Size:** 1.0 mg**Synonyms:** Ciliary Neurotrophic Factor**Description:**

Ciliary Neurotrophic Factor (CNTF) is a polypeptide hormone which acts within the nervous system where it promotes neurotransmitter synthesis and neurite outgrowth in certain neuronal populations. CNTF is a potent survival factor for neurons and oligodendrocytes and may play a role in reducing tissue damage during increased inflammation. A mutation in this gene, which results in aberrant splicing, leads to ciliary neurotrophic factor deficiency, however this phenotype is not causally related to neurologic disease.

Recombinant Rat Ciliary Neurotrophic Factor (CNTF) produced in *E. coli* is a single, non-glycosylated polypeptide chain of 199 amino acids and a molecular mass of 22.9 kDa. It has been purified by chromatographic techniques.

Source: *E. coli***Biological Activity:** ED₅₀ < 30ng/ml, measured by its ability to induce alkaline phosphatase production by TF-1 Cells.**Molecular Weight:** 22.9 kDa, observed by reducing SDS-PAGE**Formulation:** Lyophilized after extensive dialysis against 50mM Tris, pH 8.0.**Reconstitution:** Reconstituted in ddH₂O at 100 µg/ml.**Purity:** > 95% as analyzed by SDS-PAGE.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant Rat CNTF remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rrCNTF should be stable up to 1 week at 4°C or up to 3 months at -20°C.