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# Certificate of Analysis and Data Sheet Recombinant Human alpha-Synuclein

**Catalog No.**  
228-10076

**Source:**  
*Escherichia Coli.*

### **Synonyms**

Alpha-synuclein, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, NACP, PD1, PARK1, PARK4, MGC110988,  $\alpha$ -Synuclein, SNCA.

### **Introduction**

Synuclein (amino acids 1-140), an acidic neuronal protein of 140 amino acids, is extremely heat-resistant and is natively unfolded with an extended structure primarily composed of random coils.  $\alpha$ -synuclein has been suggested to be implicated in the pathogenesis of Parkinson's disease and related neurodegenerative disorders, and more recently, to be an important regulatory component of vesicular transport in neuronal cells. Moreover, recent studies have shown that  $\alpha$ -synuclein has chaperone activity and that this activity is lost upon removing its C-terminal acidic tail (amino acids 96-140).

### **Description**

$\alpha$ -Synuclein Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain of 140 amino acids having a molecular mass of 14.4kDa. The Recombinant Human  $\alpha$ -Synuclein is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Sterile filtered colorless solution.

### **Formulation**

The protein (1mg/ml) contains 20mM Tris-HCl buffer (pH 7.5), 0.1M NaCl and 1mM MgCl<sub>2</sub>.

### **Stability**

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Avoid multiple freeze-thaw cycles.**

### **Purity**

Greater than 95.0% as determined by SDS-PAGE.

### **Amino acid sequence**

MDVFMKGLSK/ AKEGVVAAAE/ KTKQGVAEAA/ GKTKEGVLYV/  
GSKTKEGVVH/ GVATVAEKTG/  
EQVTNVGGAV/ VTGVTAVAQK/ TVEGAGSIAA/ ATGFVKKDQL/  
GKNEEGAPQE/ GILEDMPVDP/ DNEAYEMPSE/ EGYQDYEPEA.

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