

**SA6002X****Human Alpha-Synuclein / SNCA (A53T Mutant) - Purified****Alternate names:**

NACP, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, PARK1

**Quantity:**

0.5 mg

**Concentration:**

1.0 mg/ml

**Background:**

Alpha Synuclein is implicated in the regulation of dopamine release and transport. It is a soluble protein, expressed principally in the brain but also expressed in low concentrations in all tissues examined (except liver). In the nervous system, alpha Synuclein is primarily located at presynaptic terminals and is found membrane bound in dopaminergic neurons. It can form filamentous aggregates that are the major non amyloid component of intracellular inclusions in several neurodegenerative diseases (synucleinopathies), including Parkinson's Disease. Alpha Synuclein induces fibrillization of microtubule associated protein tau and reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase 3 activation. Alpha synuclein is a protein phosphorylated predominantly on serine residues.

**Uniprot ID:**[P37840](#)**NCBI:**[NP\\_000336.1](#)**GeneID:**[6622](#)**Species:**

Human

**Source:**

E. coli

**Format:****State:** Liquid purified protein**Purity:** >95% by SDS-PAGE**Buffer System:** 20 mM Tris-HCl buffer (pH 7.5) containing 0.1 M NaCl**Description:**

A Parkinson's disease-related point mutant (A53T) of alpha-Synuclein. A53T mutant of  $\alpha$ -synuclein was overexpressed in E. coli and the recombinant protein was purified to apparent homogeneity by taking advantage of the thermosolubility of the protein and by using conventional column chromatography techniques.

**AA Sequence:**

MDVFMKGLSK AKEGVVAAAE KTKQGVAEAA GKTKEGVLYV GSKTKEGVVH GVTTVAEKTKEQVTNVGGAV VTGVTAVAQK TVEGAGSIAA ATGFVKKDQL GKNEEGAPQE GILEDMPVDPDNEAYEMPSE EGYQDYEPEA

**Molecular weight:** 14.490 kDa (140 aa) (Real MW on SDS-PAGE will be shift up)**Storage:**

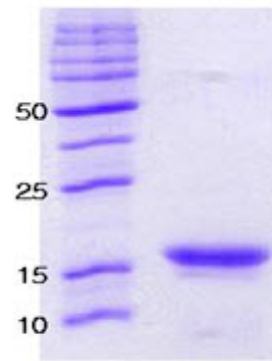
Store (in aliquots) at -20°C. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**General Readings:**

1. Polymeropoulos M. H., et al.. (1997) Science 276, 2045- 2047.
2. Park, S. M. et al. (2002) Blood, 100(7) 2506-2514.

Pictures:



15% SDS-PAGE (3ug)

Recombinant Human Alpha-Synuclein /  
SNCA (A53T Mutant): 15% SDS PAGE

