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Schillerstr. 5

SA6010 Human Alpha-Synuclein / SNCA (1-95) - Purified

Alternate names: NACP, Non-A beta component of AD amyloid, Non-A4 component of amyloid

precursor, PARK1

Quantity: 0.1 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: <u>NP_000336.1</u>

GeneID: 6622
Species: Human
Source: E. coli

Format: State: Liquid protein

Purity: >95% by SDS-PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 7.5) containing 0.1 M NaCl

Description: A deletion mutant of alpha-synuclein (amino acids 1-95), which contains the N-

terminal amphipathic domain and NAC region.

Alpha-synuclein 1-95 was overexpressed in E. coli and the recombinant protein was purified to apparent homogenity by using conventional column chromatography techniques.

AA Sequence:

 ${\tt MDVFMKGLSK} \ \ {\tt AKEGVVAAAE} \ \ {\tt KTKQGVAEAA} \ \ {\tt GKTKEGVLYV} \ \ {\tt GSKTKEGVVH} \ \ {\tt GVATVAEKTK}$

EQVTNVGGAV VTGVTAVAQK TVEGAGSIAA ATGFV **Molecular weight:** 9.391 kDa (95 amino acids)

Storage: Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C. Avoid repeated freezing

and thawing.

Shelf life: one year from despatch.

General Readings: 1. Ueda et al., (1993) Proc. Natl. Acad. Sci. 90, 11282-11286.

2. Jakes et al., (1994) FEBS Letters 345, 27-32.



Pictures:



15% SDS-PAGE (3ug)