Recombinant human alpha-Synuclein (lyophilized) protein

Catalog Number: SNA2001L

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-140aa

UniProt No.
P37840

NCBI Accession No.
NP_000336

Alternative Names
SNCA, NACP, PARK1, PARK4, PD1, α-synuclein Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, Parkinson disease 4, autosomal dominant Lewy body

PRODUCT SPECIFICATION

Molecular Weight
14.4 kDa (140aa) confirmed by MALDI-TOF (Molecular weight on SDS-PAGE will appear higher)

Concentration
Reconstitute in sterile distilled water at a concentration of 1mg/ml or less.

Formulation
Lyophilized from a 0.2 um filtered in 20mM Tris-HCl buffer (pH 7.5) containing 100mM NaCl, 1mM MgCl2

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
Non-Tagged

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
alpha-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

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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).

Amino acid Sequence

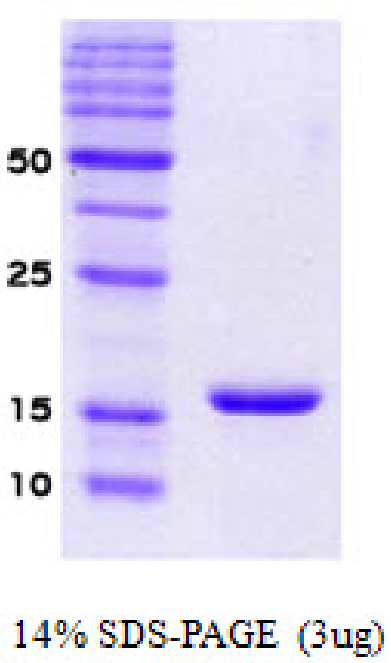
MDVFMKGLSK AKEGVVAAAE KTKQGVAEAA GKTKEGVLYV GSKTKEGVVH GVATVAEKTK EQVTNVGGAV VTGVTAVAQK TVEGAGSIAA ATGFVKKDQL GKNEEGAPQE GILEDMPVDP DNEAYEMPSE EGYQDYEPEA

General References

Jakes, R., et al. (1994) FEBS lett. 345, 27-32
ueda, K., et al. (1993) Proc. Natl. Acad. Sci. uSA 90, 11282-11286
Kim, J. (1997) Molecules and Cells 7, 78-83
Paik, S. R., et al. (1997) Arch. Biochem. Biophys. 344, 325-334.

DATA

SDS-PAGE



14% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.