ANASPEC

EndoClear Human Recombinant alpha-synuclein Protein

Revision Number: 2.0	D Last updated: 18March2024	
Catalog # A	AS-55555	
Size 1	100 μg, 500 μg, 1000 μg	

Product Name:	EndoClear Human Recombinant alpha-synuclein Protein	
Catalog Number:	AS-55555	
Lot Number:	See label on the vial	
Amount/size:	100 μg, 500 μg, 1000 μg	
Source: The sequence (Accession # NP_000336) corresponding to the full-length human a- synuclein protein plus an affinity tag was expressed in E. coli. The recombinant a-synuclein protein was purified from bacterial lysate using proprietary method, including tag cleavage. The resulting protein contains an additional Gly at the N-term of the a-synuclein sequence. The calculated molecular mass of the recombinant a-synuclein protein is ~14.5 kDa.		
Activity:	α -synuclein was assayed for the fibrillation properties using Thioflavin T assay.	
Applications:	Fibrillation, oligomerization, cell toxicity studies.	
Purity:	Greater than 90% as determined by SDS-PAGE.	
Endotoxin:	Less than 0.1 EU per μ g/protein as tested by LAL method.	
Storage:	The purified α -synuclein is supplied as lyophilized powder nearly salt free. Store at 2-4 °C for immediate use within 1-2 weeks or at –80 °C for up to 12 months.	

Instructions:

A-synuclein is a major component of Lewy bodies in the affected neurons in Parkinson's disease.¹⁴ This protein consists of a conserved degenerative amino-terminal domain and an acidic carboxyl-terminal with higher sequence divergence.¹⁻⁴ A-synuclein is predominantly expressed in brain: specifically in cerebellum, thalamus, neocortex, hippocampus, and striatum regions.¹⁻² Other tissues express α -synuclein at very low levels.¹⁻⁴ The physiological role of α -synuclein is not yet well understood. However, the presence of imperfect KTKEGV lipid interacting repeats suggests that it may be involved in synaptic vesicle homeostasis.³

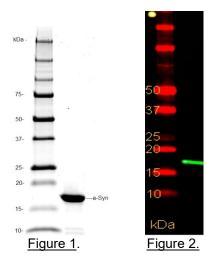


Figure 1. Human α -synuclein on SDS-PAGE. Purified protein was loaded onto 10-20% Tris-HCl gel at 3 μ g/well.

Figure 2. Western Immunoblot of α -synuclein. Purified α -synuclein protein was probed with anti- α -synuclein specific antibody.

Related Products

Product Name	Cat. #
Recombinant human a - synuclein, HiLyte Fluor™488 labeled	AS-55457
SensoLyte® Anti-a-Synuclein (Human) ELISA Kit	AS-55550-H
SensoLyte® Anti-a-Synuclein (Rat) ELISA Kit	AS-55550-R
Recombinant human a - synuclein, biotin labeled	AS-55581
EndoClearPlus recombinant human a-synuclein	AS-55555
EndoClear recombinant mouse a-synuclein	AS-56082
EndoClear recombinant rat a-synuclein	AS-56083

References:

- 1. Rivers, R. et al. Protein Science 17, 887-898 (2008).
- 2. Bruening, W. et al. Cancer. 88, 9, 2154-2163 (2000).
- 3. George M. J. Genome Biology 3, 1, 1-6 (2001).
- 4. Latawiec, D. et al. PloS ONE 5, 2, 1-8 (2010).

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