

Product Datasheet

Human α -Synuclein Monomers

Sequence	MDVFMKGLSKAKEGVVAAAEEKTKQGVAEAAGKTKEGVL YVGSKTKEGVVHGVATVAEKTKEQVTNVGGAVVTGVTA VAQKTVEGAGSIAAATGFVKKDQLGKNEEGAPQEGILED MPVDPDNEAYEMPSEEGYQDYEPEA
Swiss Prot	P37840
Gene ID	6622
Accession #	NP_000336.1
Species	Human
Amino acids	1-140, full length protein
Conjugates/Tags	No Tag
Molecular weight	14 kDa (14,460 Da)
Nature	Recombinant, expressed in Escherichia coli
Certificate of analysis	Certified > 95 % SDS-PAGE. Full characterization provided in Figure 1.
Field of Use	Not for use in humans. For research purposes only.
Applications	In vitro assays, cellular assays, animal studies or as standards in WB, SDS-PAGE, ELISA, and other immunoassays.
Form	Shipped lyophilized on dry ice.
Preparation	Resuspend in appropriate buffer for downstream assays. We recommend resuspension in PBS, at a concentration range 0.1 – 2 μ g/ μ l.
Storage	Store at -80°C upon receipt. Following resuspension, aliquot and store at -80°C.
Handling	We recommend avoiding repeated freeze-thaw cycles.
Product Citation	Please cite this product as “Human α -Synuclein Monomers (ND Biosciences SA, Switzerland, Catalogue #ND001 – Lot #05/22-001.001)”
Safety measures	This product is an active protein and may elicit a biological response in vivo, handle with caution.
References	Detailed protocols on how to handle this protein and remove any preformed aggregates are presented in: Kumar ST, Donzelli S, Chiki A, Syed MMK, Lashuel HA. A simple, versatile and robust centrifugation-based filtration protocol for the isolation and quantification of α -synuclein monomers, oligomers and fibrils: Towards improving experimental reproducibility in α -synuclein research. J Neurochem. 2020;153(1):103-119. doi:10.1111/jnc.14955.

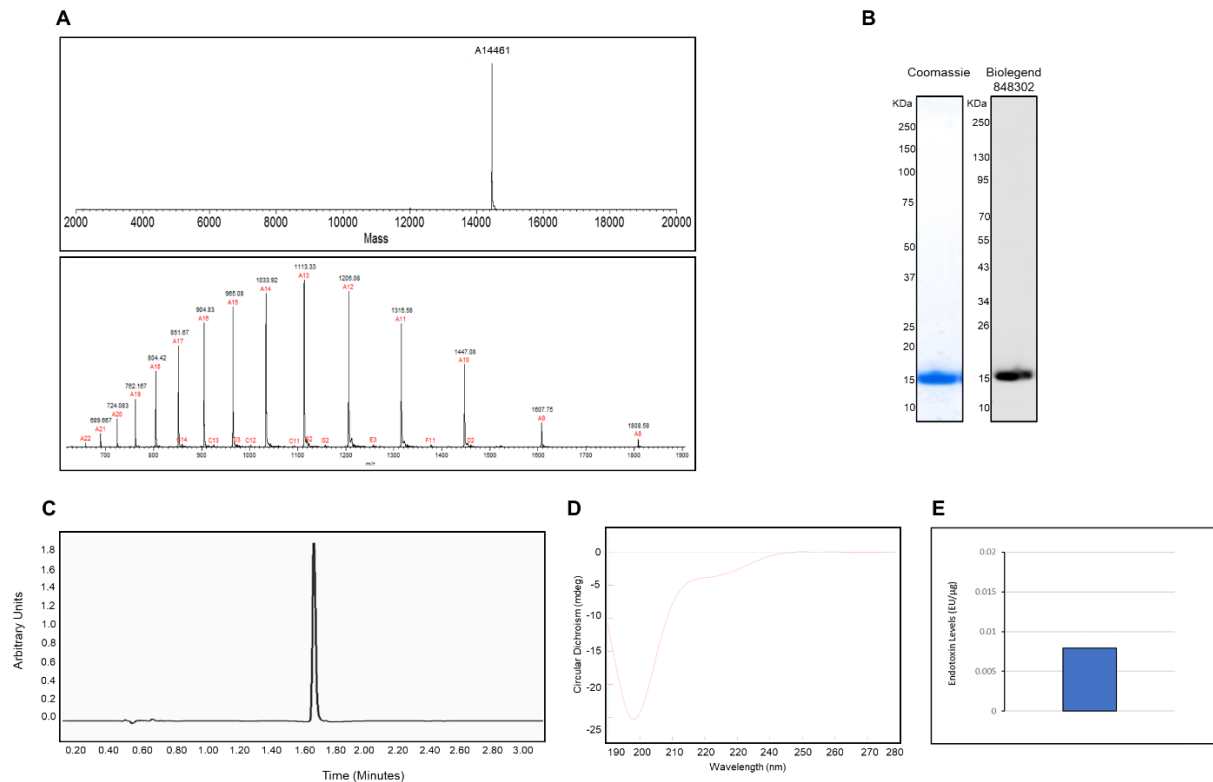


Figure 1. Characterization of α -Syn monomers. (A) Mass Spec (ESI) analysis confirms the integrity of the α -Syn protein and shows a mass of ~ 14460 Da. **(B)** Coomassie staining (left) at $1\mu\text{g}$ loaded amount shows that α -Syn migrates as a single band at ~ 14 kDa. Western blotting (right) confirms reactivity of α -Syn monomers (at 100ng loaded amounts) with the Biologend antibody (848302, epitope: 80-96). **(C)** UPLC analysis shows a single peak at ~ 1.60 min, establishing the purity of the protein. **(D)** CD analysis shows a spectrum with a minimum at ~ 200 nm, establishing disordered conformational ensemble of α -Syn monomers. **(E)** Assessment of endotoxin levels establishes ultra-low levels of endotoxin units (EU) per μg of α -Syn protein, at 0.0079 EU/ μg .



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We are committed to delivering reagents and services with the highest standards. Every step in our workflow is subjected to strict quality control procedures and all the relevant reports, where applicable, are provided to our Clients.

We work closely with our clients to ensure that each project is tailored to meet their requirements (purity and scale), specification (biochemical and biophysical properties) and intended application and research activities.

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