Product Data Sheet

Product Name:	Recombinant Human α-Synuclein (1-140), Biotin Labeled
Catalog Number:	AS-55581 Lot Number: See label on vial
Amount:	200 µg
Source:	The recombinant human α-synuclein (1-140) (GenBank Accession # NP_000336) was expressed and purified from E. *coli* and conjugated with biotin. **Recombinant protein is produced without an affinity tag.**
Purity:	Greater than 90% as determined by SDS-PAGE and mass spectrometry.
DOS:	See label on the vial
Storage:	Biotinylated human α-synuclein is supplied frozen at 1 mg/ml in 10 mM sodium phosphate buffer (pH=7.4). Store at 2-4 ºC for immediate use within 1 week or at –80 ºC for up to 12 months. Keep in dark and avoid repeated freeze-thaw cycles.
Instructions:	Parkinson's disease is predominantly a movement disorder resulting from degeneration of dopaminergic neurons in the substantia nigra. The cause of the disease is unknown, but substantial evidence suggests that the aggregation of α-synuclein is a critical step in the etiology of Parkinson's disease (PD). α-Synuclein is an abundant brain protein of 140 residues that is present in high concentrations at presynaptic terminals and is found in both soluble and membrane-associated fractions of the brain. Several possible functions have been suggested, and it appears to be involved in vesicle release and trafficking. In vitro incubation of α-synuclein in the presence of certain amounts of salt (i.e. 0.1M NaCl) with agitation can form fibril structure.

Related Products:

Product Name	Cat. #
EndoClear™Plus Human Recombinant human α - synuclein	**AS-56081-100** **AS-56081-500**
EndoClear™ Human Recombinant human α - synuclein	**AS-55555-100** **AS-55555-500** **AS-55555-1000**
Recombinant Human β - Synuclein (1 - 134)	**AS-55458-100** **AS-55458-500** **AS-55458-1000**
SensoLyte® Anti-α-Synuclein (Human) ELISA Kit	**AS-55550-H**
Recombinant human α - synuclein (1 - 140), HiLyte Fluor™488 labeled	**AS-55457**

References:

1. Trojanowski, J. Q. & Lee, V. M. (2003) *Ann. N. Y. Acad. Sci.* **991**, 107-110.
2. Masliah, E., et al. (2000) *Science* **287**, 1265-1269.
3. Van Der, P. H, *et al.* (2000) *J. Neurosci.* **20**, 6021-6029.
4. Feany, M. B. & Bender, W. W. (2000) *Nature* **404**, 394-398.
5. Weinreb, P. H., et al. (1996) *Biochemistry* **35**, 13709-13715.

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