

MATERIAL DATA SHEET

Recombinant Human α -Synuclein (Low Endotoxin)

Cat. # SP-486

α -Synuclein is a member of a family of small, soluble proteins that also include β -, and γ -Synuclein. α -Synuclein is predominantly expressed in neurons of the central nervous system, specifically in the presynaptic region of nerve terminals. This protein cycles between a free, partially unfolded form and a helical, membrane-bound form. α -Synuclein can aggregate in vivo and in vitro, forming various oligomeric species and fibrillar and amorphous aggregates. The fibrils and amyloid forms are major components of Lewy Bodies and have been linked to the pathogenesis of Parkinson's disease dementia. α -Synuclein aggregates can also be found associated with amyloid plaques in Alzheimer's disease. This product has an endotoxin level < 0.01 EU per 1 μ g of protein.

Product Information

Quantity:	500 μ g
MW:	14 kDa
Source:	<i>E. coli</i> -derived human alpha-Synuclein protein Accession # P37840
Stock:	X mg/ml (X μ M) in 50 mM HEPES pH 7.5, 100 mM NaCl, 10% (v/v) Glycerol, 2 mM TCEP
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use:	Recombinant Human α -Synuclein is ideal for use as a control substrate for in vitro Ubiquitin conjugation using select Ubiquitin E3 ligases such as CHIP/Stub1. Reaction conditions will need to be optimized for each specific application.
Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">• 24 months from date of receipt, -70 °C as supplied.• 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Breydo L., Wu J.W., Uversky V.N. (2012) Biochim Biophys Acta **1822**: 261
2. Chen R.H. et al. (2013) J. Biol. Chem. **288**: 7438
3. Li X. et al. (2008) Acta. Biochim Biophys Sin (Shanghai) **40**: 406
4. Surguchov A. (2008) Int Rev Cell Mol. Biol. **270**: 225
5. Xia Q. et al. (2008) Front Biosci. **13**: 3850

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