

Lot# XXXXX

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MATERIAL DATA SHEET**His₆- α -Synuclein, human recombinant****Cat. # SP-480**

α -Synuclein is member of a family of small soluble proteins that include also β -, and γ -Synuclein. It is predominantly expressed in neurons of the central nervous system in the presynaptic region of nerve terminals, where cycles between free partially unfolded and helical membrane-bound forms.

α -Synuclein can self-aggregate *in vivo* and *in vitro*, forming various oligomeric species and fibrillar and amorphous aggregates. The fibrils and amyloid forms of α -Synuclein are major components of Lewy bodies and Lewy neurites and have been linked to the pathogenesis of Parkinson's disease, Parkinson's disease dementia, and dementia with Lewy bodies. α -Synuclein aggregates can be also found associated with amyloid plaques in Alzheimer's disease. This recombinant protein may be used as a substrate for various E3 ligases, and contains a C-terminal His₆ tag.

Product Information

Quantity:	500 μ g
Stock:	X mg/ml (X μ M) in 50 mM Hepes pH 7.5, 100 mM NaCl.
MW:	15 kDa
Purity:	> 95 % by SDS-PAGE

Use & Storage

Use:	Typical concentrations for <i>in vitro</i> ubiquitination assays are 0.5-2.5 μ M depending on experimental conditions and detection method.
Storage:	Store at -20°C. Avoid multiple freeze/thaw cycles.

Literature

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