Recombinant Human His6 α-Synuclein

Catalog Number: SP-480

DESCRIPTION

Source	*E. coli*-derived human alpha-Synuclein protein Met1 - Ala140 with a C-terminal 6-His tag Accession # P37840.1
Predicted Molecular Mass	15 kDa

SPECIFICATIONS

Activity	Recombinant Human His6-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. We recommend an initial Recombinant Human His6-α-Synuclein concentration of 0.5-2.5 µM.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.
Formulation	Supplied as a 0.2 µm filtered solution in HEPES and NaCl. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Shipping	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 6 months from date of receipt, -70 °C as supplied. • 3 months, -70 °C under sterile conditions after opening.

BACKGROUND

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 it cycles between a free, partially unfolded and a helical, membrane-bound form. α-Synuclein can self-aggregate *in vivo* and *in vitro*, forming various oligomeric species and fibrillar and amorphous aggregates. The fibrils and amyloidal 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.

References:

1. Breydo L, *et al.* (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.

Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449