



Product Information Sheet for Product No. 1020.0301.0201

For *in vitro* academic research use only.

Not for use in diagnostic applications.

Not for use in humans.

Not for re-sale or re-import.

Rat α -synuclein (1–140) in water

Source	Recombinantly expressed in <i>E. coli</i> from a plasmid vector containing a DNA sequence encoding rat α -synuclein of amino acid residues 1–140 (see also UniProt P37377).
Amino acid sequence	GSMDVFMKGLSKAKEGVVAAAETKQGVAAEAGKTKEGVLYVGSKTKEGVVHGV TTVAEKTKEQVTNVGGAVVTGVTAVAQKTVEGAGNIAAATGFVKKDQMGKGEEGY PQEGILEDMPVDPSSSEAYEMPSEEGYQDYEPEA
Molecular weight	14659 kg · mol ⁻¹
Chain length	142 amino acids
Purity	> 95 % by SDS-PAGE
Supply	Finally dialysed in pure water, shock frozen in liquid nitrogen at a protein concentration of 2.5 mg·ml ⁻¹
Storage	– 80°C
Thawing	Gentle agitation at 37°C until all ice is melted. Keep on ice. Do not refreeze
Description	α -synuclein is associated with human neurodegenerative diseases, where it forms aggregates in nerve tissues. Diseases include Parkinson's disease, dementia with lewy bodies, and multi-system atrophy, but also other's disease like Alzheimer's Disease. Lewy Bodies are well-known cytoplasmic deposits of α -synuclein in Parkinson's disease.
Production	Product of Germany.
Term & Conditions	SeNostic terms & conditions (AGB) as of the date of product order apply. Go to www.senostic.com for details.

References

1. Spillantini, M.G., et al., *Alpha-synuclein in Lewy bodies*. *Nature*, 1997. **388**(6645): p. 839-40.
2. Conway, K.A., J.D. Harper, and P.T. Lansbury, Jr., *Fibrils formed in vitro from alpha-synuclein and two mutant forms linked to Parkinson's disease are typical amyloid*. *Biochemistry*, 2000. **39**(10): p. 2552-63.
3. Walker, L.C. and H. LeVine, *The cerebral proteopathies: neurodegenerative disorders of protein conformation and assembly*. *Molecular neurobiology*, 2000. **21**(1-2): p. 83-95.
4. Vilar, M., et al., *The fold of alpha-synuclein fibrils*. *Proceedings of the National Academy of Sciences of the United States of America*, 2008. **105**(25): p. 8637-42.