



## Product Information Sheet for Product No. 1020.0101.0201

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.

### Human $\alpha$ -synuclein (1–140) in water

<b>Source</b>	Recombinantly expressed in <i>E. coli</i> from a plasmid vector containing a DNA sequence encoding human $\alpha$ -synuclein of amino acid residues 1–140 (see also UniProt P37840).
<b>Amino acid sequence</b>	GSMDVFMKGLSKAKEGVVAAAEEKTKQGVAEAAAGKTKEGVLYVGSKTKEGVVHGVA TVAEKTKEQVTNVGGAVVTGVTAVAQKTVEGAGSIAAATGFVKKDQLGKNEEGAPQ EGILEDMPVDPDNEAYEMPSEEGYQDYEPEA
<b>Molecular weight</b>	14604 kg · mol <sup>-1</sup>
<b>Chain length</b>	142 amino acids
<b>Purity</b>	> 98% by SDS-PAGE
<b>Supply</b>	Finally dialysed in pure water, shock frozen in liquid nitrogen at a protein concentration of 2.5 mg·ml <sup>-1</sup>
<b>Storage</b>	– 80°C
<b>Thawing</b>	Gentle agitation at 37°C. Refreezing is not recommended and should be avoided.
<b>Description</b>	$\alpha$ -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 $\alpha$ -synuclein in Parkinson's disease.
<b>Production</b>	Product of Germany.
<b>Term &amp; Conditions</b>	SeNostic terms & conditions (AGB) as of the date of product order apply. Go to <a href="http://www.senostic.com">www.senostic.com</a> 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.