

α -Synuclein, Human, Recombinant, *E.coli*

Cat. No. CSR-SYN04

Updated on Nov. 10th, 2021

※ This product is manufactured under license from Takashi Nonaka, Ph.D. and Masato Hasegawa, Ph.D. of Department of Dementia and Higher Brain Function, Tokyo Metropolitan Institute of Medical Science.

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【 I 】 Introduction

In spite of bacterially expressed human alpha-synuclein (α -syn) has been widely used in structural and functional studies, approximately 20% of human α -syn expressed in *Escherichia coli* is mistranslated and that a Cys residue is incorporated at position 136 instead of a Tyr¹. This mutagenesis of codon resulted the levels of dimeric α -syn were increased by misincorporation¹.

To avoid these potential artefacts, this product is codon-optimized recombinant protein, and can be used as human α -syn under much similar condition to that of *in vivo*.

This product can also be used for a comparison (control) of α -Synuclein Fibrils (CSR-SYN03).

【 II 】 Product Information

Storage : -20°C

Description	Quantity	Concentration	Purity	Form
α -Synuclein (Human)	0.1 mg (100 μ g)	1 mg/mL	\geq 90% (SDS-PAGE)	30 mM Tris-HCl buffer (pH7.5)
	1 mg			

* CAUTION: Aliquot to avoid cycles of freeze/thaw. Recommended to divide into small amounts before first time using. Repeated freezing and thawing may produce insoluble matter. If insoluble matter is formed, transfer it to a suitable centrifuge tube, centrifuge at 20,000 x g or more at 4 ° C for 30 minutes, and use the supernatant.

This product does not contain preservatives. Please add NaN3 (0.1%) etc. if necessary.

【 III 】 References

[1] FEBS Lett. 2006 Mar 20;580(7):1775-9. Cysteine misincorporation in bacterially expressed human alpha-synuclein. Masuda M, Dohmae N, Nonaka T, Oikawa T, Hisanaga S, Goedert M, Hasegawa M. PMID: 16513114

【IV】 Related products

Description	Cat. No.	Quantity
α -Synuclein Aggregation Assay Kit	CSR-SYN01	1 KIT (300 TEST)
Amyloid Fluorescent Staining Kit	CSR-SYN02	1 KIT (100 TEST)
Human α -Synuclein Fibrils	CSR-SYN03	0.1 MG
Human α -Synuclein, Recombinant, E.coli	CSR-SYN04	0.1 MG
		1 MG
Mouse α -Synuclein Fibrils	CSR-SYN05	0.1 MG
Mouse α -Synuclein, Recombinant, E.coli	CSR-SYN06	0.1 MG
		1 MG



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