

# Alpha Synuclein Protein

Human Recombinant Alpha Synuclein  
Oligomers (Epigallocatechin Gallate (EGCG)  
Stabilized)  
Catalog No. SPR-469



Discovery through partnership | Excellence through quality



**EAGLE**  
BIOSCIENCES

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## Product Name

Alpha Synuclein Protein

## Description

Human Recombinant Alpha Synuclein Oligomers (Epigallocatechin Gallate (EGCG) Stabilized)

## Applications

WB, SDS-PAGE, In vivo assay, In vitro assay

## Concentration

Lot/batch specific. See included datasheet.

## Conjugates

No tag

## Nature

Recombinant

## Species

Human

## Expression System

E. coli

## Purity

>95%

## Protein Length

Full Length

## Field Of Use

Not for use in humans. Not for use in diagnostics or therapeutics. For research use only.

## Properties

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### Storage Buffer

PBS pH 7.4

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### Storage Temperature

-80°C

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### Shipping Temperature

Dry Ice. Shipping note: Product will be shipped separately from other products purchased in the same order.

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### Purification

Ion-exchange Purified

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### Specificity

~14.46kDa

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### Cite This Product

Human Recombinant Alpha Synuclein Protein (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SPR-469)

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### Certificate Of Analysis

Certified >95% pure using SDS-PAGE analysis.

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## Biological Description

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### Alternative Names

Alpha synuclein protein, Alpha-synuclein oligomer, Alpha synuclein protein oligomer, Alpha-synuclein protein, Non-A beta component of AD amyloid protein, Non-A4 component of amyloid precursor protein, NACP protein, SNCA protein, NACP protein, PARK1 protein, Alpha synuclein oligomers, Alpha Synuclein Protein Oligomers, SYN protein, Parkinson's disease familial 1 Protein

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### Research Areas

Alzheimer's Disease, Neurodegeneration, Neuroscience, Parkinson's Disease, Synuclein, Tangles & Tau

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### Cellular Localization



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Cytoplasm, Membrane, Nucleus

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### Accession Number

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NP\_000336.1

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### Gene ID

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6622

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### Swiss Prot

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P37840

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### Scientific Background

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Alpha-Synuclein (SNCA) is expressed predominantly in the brain, where it is concentrated in presynaptic nerve terminals (1). Alpha-synuclein is highly expressed in the mitochondria of the olfactory bulb, hippocampus, striatum and thalamus (2). Functionally, it has been shown to significantly interact with tubulin (3), and may serve as a potential microtubule-associated protein. It has also been found to be essential for normal development of the cognitive functions; inactivation may lead to impaired spatial learning and working memory (4). SNCA fibrillar aggregates represent the major non A-beta component of Alzheimers disease amyloid plaque, and a major component of Lewy body inclusions, and Parkinson's disease. Parkinson's disease (PD) is a common neurodegenerative disorder characterized by the progressive accumulation in selected neurons of protein inclusions containing alpha-synuclein and ubiquitin (5, 6). Epigallocatechin Gallate (EGCG) reduces alpha synuclein fibril formation in favour of spherical soluble oligomers (7).

### References

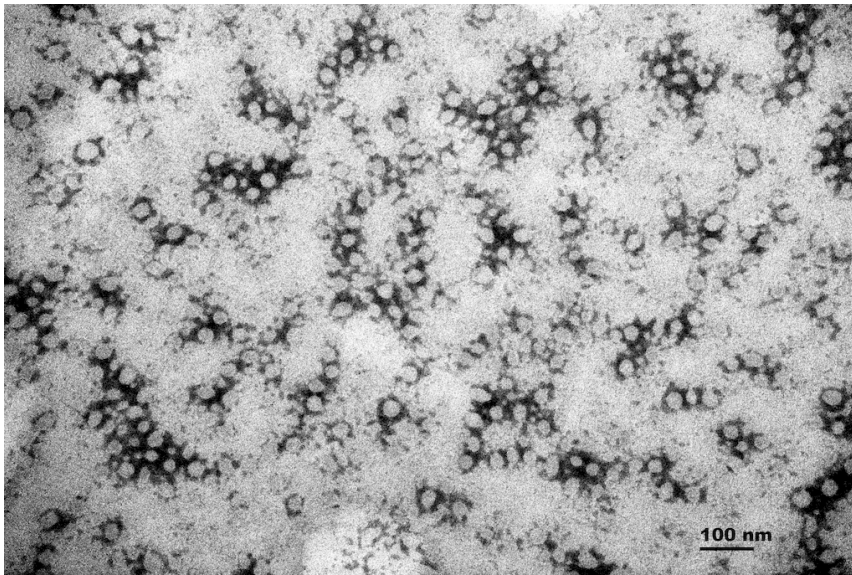
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1. "Genetics Home Reference: SNCA". US National Library of Medicine. (2013).
  2. Zhang L., et al. (2008) Brain Res. 1244: 40-52.
  3. Alim M.A., et al. (2002) J Biol Chem. 277(3): 2112-2117.
  4. Kokhan V.S., Afanasyeva M.A., Van'kin G. (2012) Behav. Brain. Res. 231(1): 226-230.
  5. Spillantini M.G., et al. (1997) Nature. 388(6645): 839-840.
  6. Mezey E., et al. (1998) Nat Med. 4(7): 755-757.
  7. Ehrnhoefer, D. E. et al. (2008). Nat Struct Mol Biol. 15(6):558-566.
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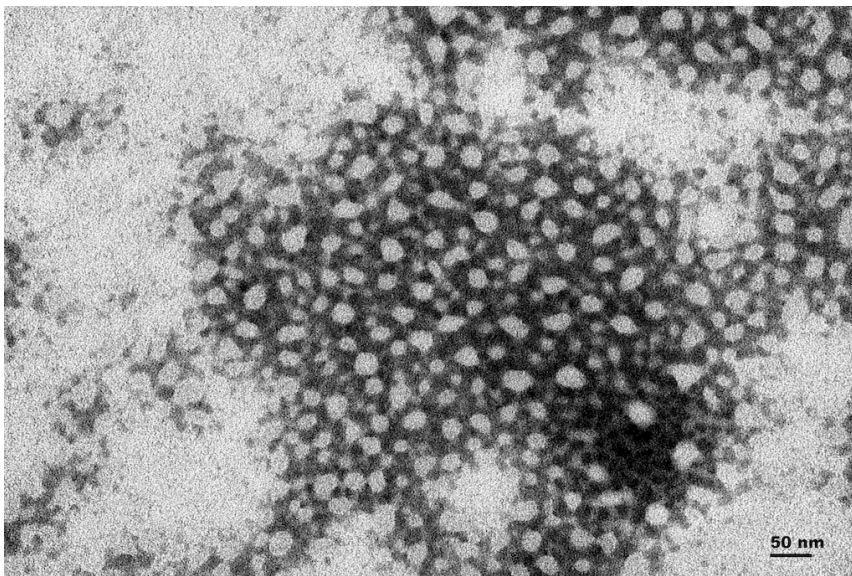
### Product Images

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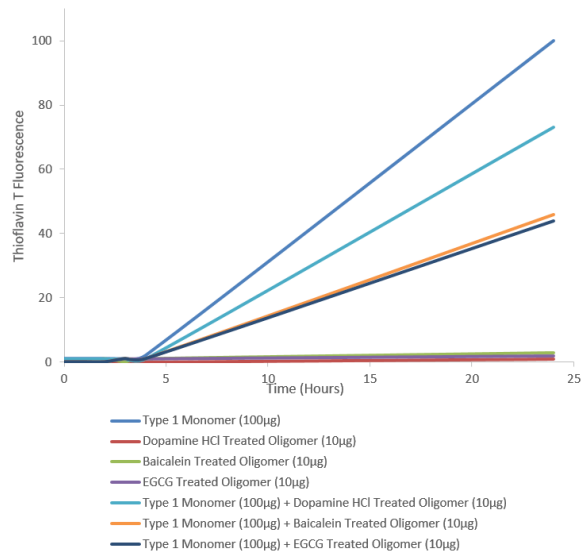


TEM of Human Recombinant Alpha Synuclein Oligomers (Inhibitor Arrested- Epigallocatechin gallate (EGCG) treated) (SPR-469)



TEM of Human Recombinant Alpha Synuclein Oligomers (Inhibitor Arrested- Epigallocatechin gallate (EGCG) treated) (SPR-469)





Thioflavin T is a fluorescent dye that binds to beta sheet-rich structures, such as those in alpha synuclein fibrils. Inhibitor Arrested- Epigallocatechin gallate (EGCG) treated oligomers (SPR-469) show very little fluorescence compared to monomers (SPR-321). Monomers combined with inhibitor-arrested oligomers show limited seeding activity.

## Product Citations (0)

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Currently there are no citations for this product.

## Reviews

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There are no reviews yet.

