



Synonym

SNCA,NACP,PARK1,alpha-Synuclein

Source

Human Alpha-Synuclein Pre-formed Fibrils, His Tag(ALN-H51H4) is expressed from E. coli cells. It contains AA Met 1 - Ala 140 (Accession # [P37840-1](#)).

Predicted N-terminus: Met 1

Molecular Characterization

Alpha-synuclein(Met 1 - Ala 140) P37840-1	Poly-his
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This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 16.3 kDa.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in PBS, pH7.4.

Contact us for customized product form or formulation.

Shipping

*This product is supplied and shipped with dry ice, please inquire the shipping cost.*

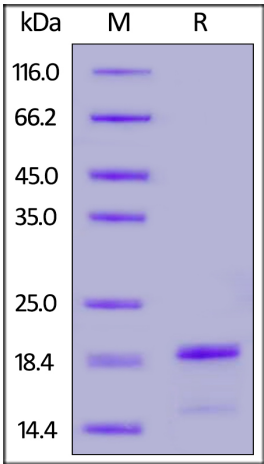
Storage

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- The product should be stored at -70°C or room temperature for short storage. Do not store fibrils on ice or at 4°C;
- The unsonicated fibril is validated to be stable after storage at -70°C for 1 year under sterile conditions;
- The sonicated fibril should be stored at -70°C for not more than 8 weeks.

SDS-PAGE



Alpha-Synuclein monomer on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ThT Assay

Discounts, Gifts,  
and more!

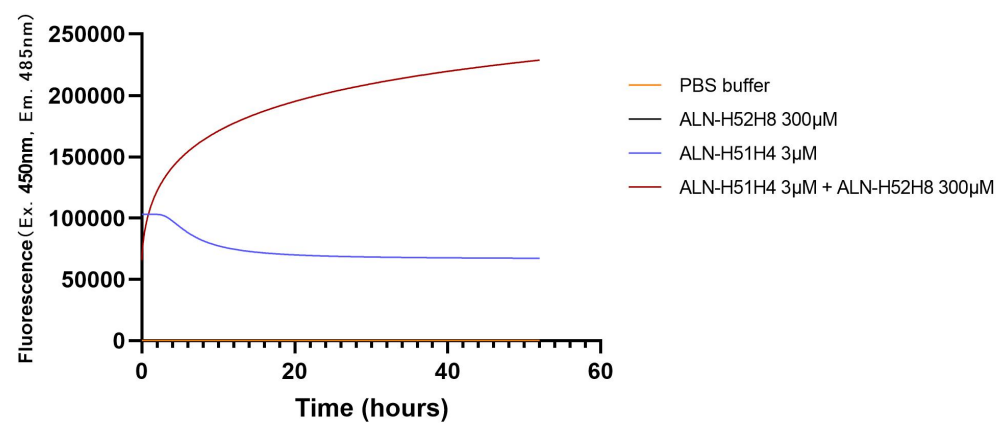


Human Alpha-Synuclein Pre-formed Fibrils Protein, His Tag

Catalog # ALN-H51H4

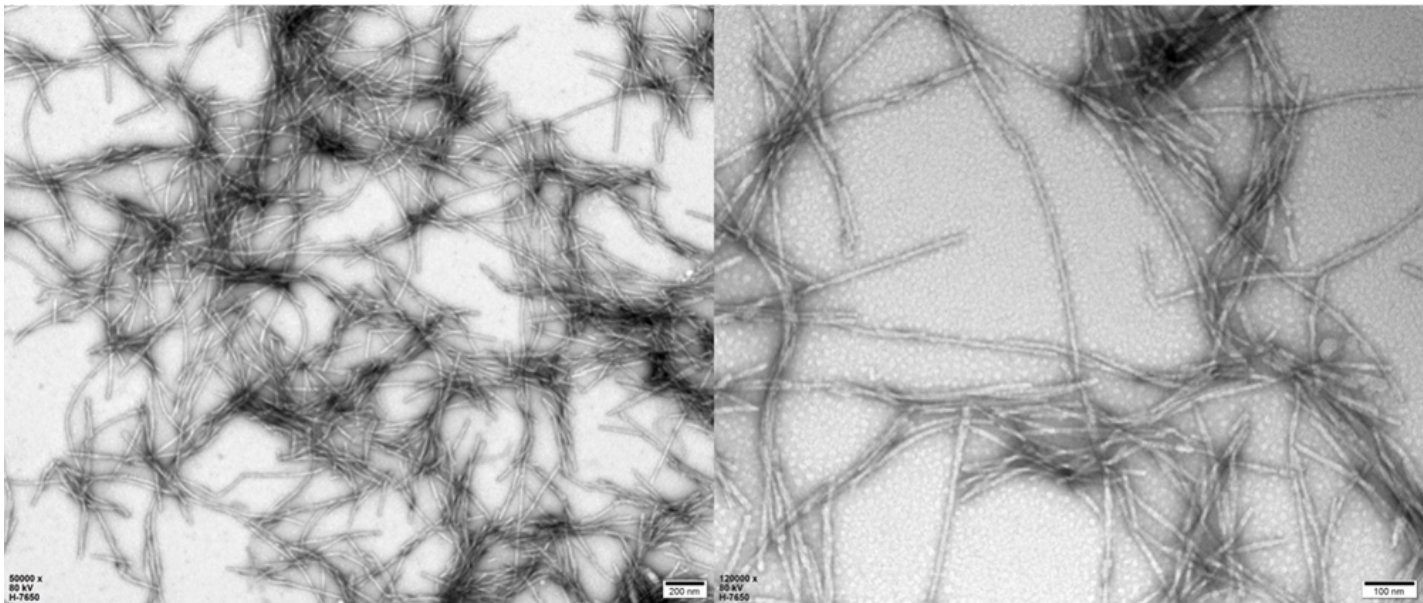


Thioflavin T Seeding Assay



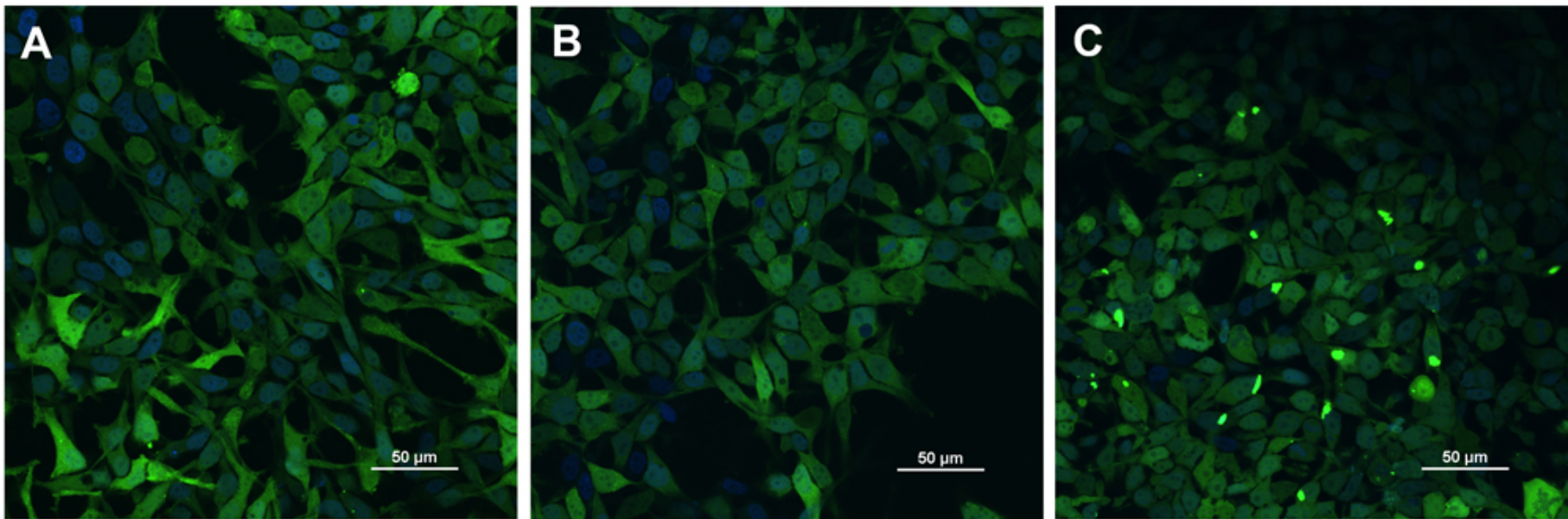
Thioflavin T is a sensitive fluorescence reporter of fibrils formulation that binds to beta sheet-rich structures. The alpha synuclein pre-formed fibrils (Cat. No. ALN-H51H4) is able to induce the aggregation of alpha synuclein monomers (Cat. No. ALN-H52H8) (Routinely tested).

Electron Microscope



Transmission electron microscopy (TEM) of alpha-synuclein preformed fibrils (Cat. No. ALN-H51H4). Fibril structure is visible on negative stain TEM images of ALN-H51H4 (Routinely tested).

Bioactivity-CELL BASE



HEK293/Human Alpha-Synuclein (GFP) Stable Cell Line (Cat. No. CHEK-ATP085) were transduced with Human Alpha-Synuclein Pre-formed Fibrils, His Tag (Cat. No. ALN-H51H4) and Human Alpha-Synuclein, His Tag (Cat. No. ALN-H52H8) respectively. The fluorescence of GFP-Alpha-Synuclein (Green) and DAPI



# Human Alpha-Synuclein Pre-formed Fibrils Protein, His Tag

Catalog # ALN-H51H4



(Blue) were detected by confocal microscope. A. Lipo2000 transduction. B. Lipo2000 and Human Alpha-Synuclein, His Tag transduction. C. Lipo2000 and Human Alpha-Synuclein Pre-formed Fibrils, His Tag transduction. Scale bars, 50  $\mu$ m (Routinely tested).

## Background

Alpha-synuclein is a neuronal protein that plays several roles in synaptic activity such as regulation of synaptic vesicle trafficking and subsequent neurotransmitter release. It acts also as a molecular chaperone in its multimeric membrane-bound state, assisting in the folding of synaptic fusion components called SREs (Soluble NSF Attachment Protein REceptors) at presynaptic plasma membrane in conjunction with cysteine string protein-alpha/DJC5. Abnormalities in alpha-synuclein are implicated in the pathogenesis of Parkinson's disease (PD). Alpha-synuclein is present in Lewy-bodies, the neuropathological hallmark of PD, and the protein and its aggregation have been widely linked to neurotoxic pathways that ultimately lead to neurodegeneration.

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