

Synonym

SNCA,NACP,PARK1,alpha-Synuclein

Source

Human Alpha-Synuclein, His Tag(ALN-H52H8) is expressed from E. coli cells. It contains AA Met 1 - Ala 140 (Accession # [P37840-1](#)).
Predicted N-terminus: Met 1

Molecular Characterization

SNCA(Met 1 - Ala 140)
P37840-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.
The protein has a calculated MW of 16.3 kDa. The protein migrates as 19 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Sterility

The sterility testing was performed by membrane filtration method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 100 mM NaAC, pH7.0 with trehalose as protectant.
Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

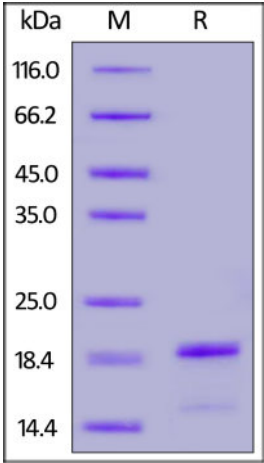
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



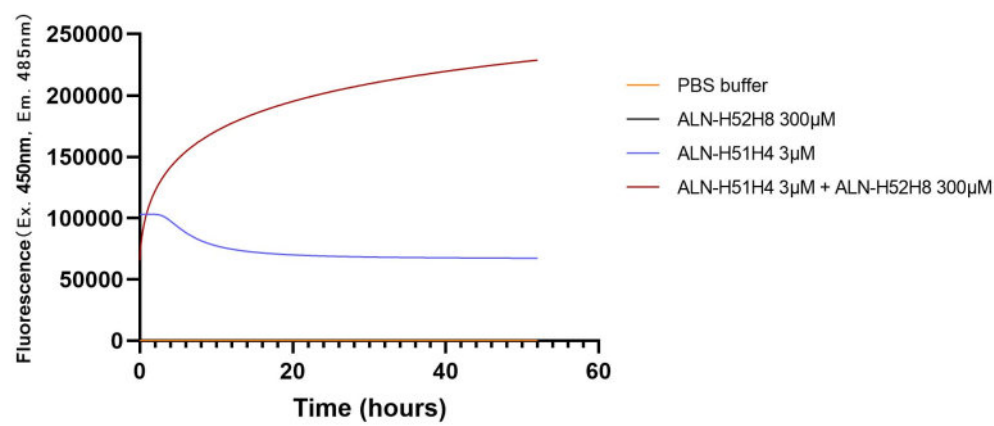
Human Alpha-Synuclein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ThT Assay

Discounts, Gifts,
and more!



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).

Background

Neuronal protein that plays several roles in synaptic activity such as regulation of synaptic vesicle trafficking and subsequent neurotransmitter release. Participates as a monomer in synaptic vesicle exocytosis by enhancing vesicle priming, fusion and dilation of exocytotic fusion pores. Mechanistically, acts by increasing local Ca²⁺ release from microdomains which is essential for the enhancement of ATP-induced exocytosis. 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. This chaperone activity is important to sustain normal SRE-complex assembly during aging. Plays also a role in the regulation of the dopamine neurotransmission by associating with the dopamine transporter (DAT1) and thereby modulating its activity.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

