Human Alpha-Synuclein (A53T) Protein, His Tag (MALS verified)

Catalog # ALN-H51H5

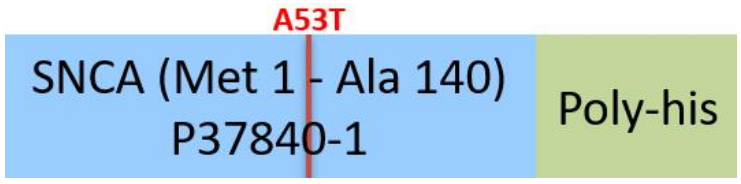
Synonym

NACP, PARK1, PARK4, PD1

Source

Human Alpha-Synuclein (A53T), His Tag(ALN-H51H5) is expressed from E. coli cells. It contains AA Met 1 - Ala 140 (Accession # P37840-1 (A53T)). Predicted N-terminus: Met 1

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 16.4 kDa. The protein migrates as 18-19 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

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

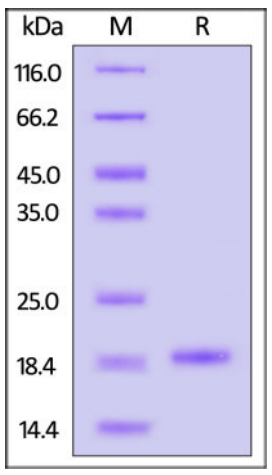
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

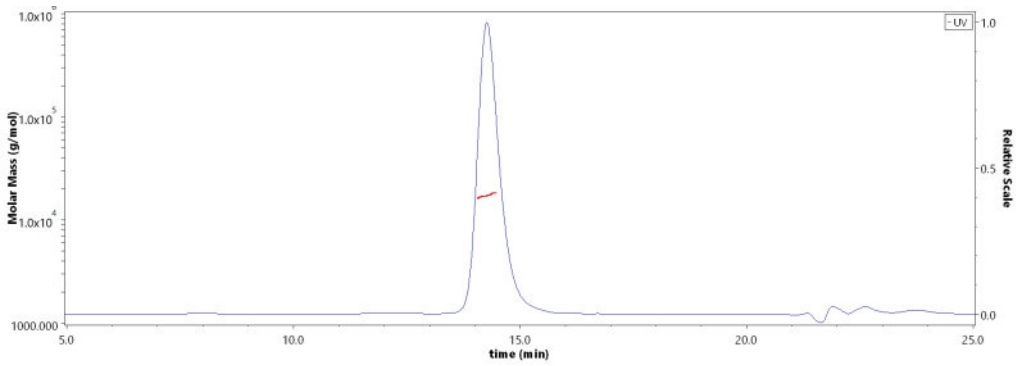
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



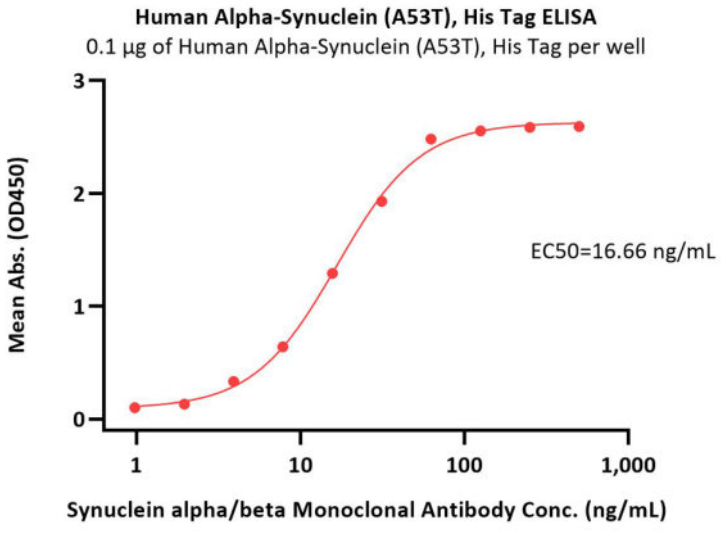
Human Alpha-Synuclein (A53T), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

SEC-MALS



The purity of Human Alpha-Synuclein (A53T), His Tag (Cat. No. ALN-H51H5) is more than 90% and the molecular weight of this protein is around 14-24 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA



Immobilized Human Alpha-Synuclein (A53T), His Tag (Cat. No. ALN-H51H5) at 1 μg/mL (100 μL/well) can bind Synuclein alpha/beta Monoclonal Antibody with a linear range of 1-31 ng/mL (QC 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.

Clinical and Translational Updates

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