

#### Synonym

SNCA, NACP, PARK 1, alpha-Synuclein

#### Source

Human Alpha-Synuclein, Fc Tag(ALN-H5253) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Ala 140 (Accession # P37840-1). Predicted N-terminus: Met 1

#### **Molecular Characterization**

SNCA(Met 1 - Ala 140) Fc(Pro 100 - Lys 330) P37840-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 40.9 kDa. The protein migrates as 47-52 kDa and 53-56 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

# Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  filtered solution in PBS, pH7.4 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**

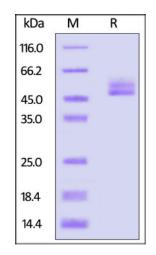
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

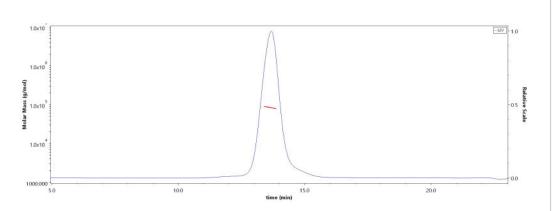
# SDS-PAGE



Human Alpha-Synuclein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

## **Bioactivity-ELISA**

### **SEC-MALS**



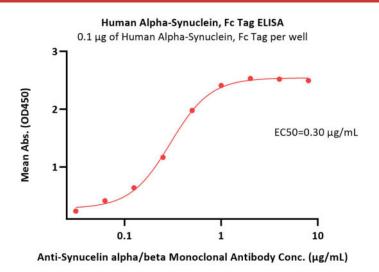
The purity of Human Alpha-Synuclein, Fc Tag (Cat. No. ALN-H5253) is more than 90% and the molecular weight of this protein is around 75-95 kDa verified by SEC-MALS.

Report

## **Human Alpha-Synuclein Protein, Fc Tag (MALS verified)**







Immobilized Human Alpha-Synuclein, Fc Tag (Cat. No. ALN-H5253) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-Synuclein alpha/beta Monoclonal Antibody with a linear range of 0.031-1  $\mu$ g/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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.