

### Synonym

SNCA, NACP, PARK 1, alpha-Synuclein

#### Source

Human Alpha-Synuclein, Tag Free(ALN-H5214) is expressed from E. coli cells. It contains AA Met 1 - Ala 140 (Accession # <u>P37840-1</u>).

Predicted N-terminus: Met 1

#### **Molecular Characterization**

# SNCA(Met 1 - Ala 140) P37840-1

This protein carries no "tag".

The protein has a calculated MW of 14.5 kDa. The protein migrates as 15-16 kDa under reducing (R) condition (SDS-PAGE).

#### Endotoxin

Less than 0.1 EU per µg by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **Formulation**

Supplied as 0.2  $\mu m$  filtered solution in 50 mM HEPES, 100 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

## **Shipping**

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

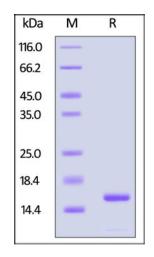
## Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

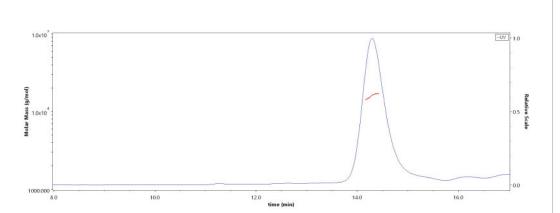
## **SDS-PAGE**



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

# **Bioactivity-ELISA**

#### **SEC-MALS**



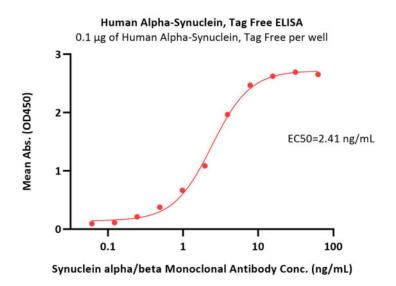
The purity of Human Alpha-Synuclein, Tag Free (Cat. No. ALN-H5214) is more than 90% and the molecular weight of this protein is around 13-19 kDa verified by SEC-MALS.

Report

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

Catalog # ALN-H5214





Immobilized Human Alpha-Synuclein, Tag Free (Cat. No. ALN-H5214) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Synuclein alpha/beta Monoclonal Antibody with a linear range of 0.1-8 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**

