# Alexa Fluor™ 488-Labeled Human Alpha-synuclein Protein, Tag Free

Catalog # ALN-HA113

## Synonym

NACP, PARK1, PARK4, PD1

## Source

Alexa Fluor 488-Labeled Human Alpha-synuclein Protein, Tag Free(ALN-HA113) 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

This protein carries no "tag".

The protein has a calculated MW of 14.5 kDa. The protein migrates as 15-17 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

## Conjugate

AF488

Excitation Wavelength: 488 nm

Emission Wavelength: 517 nm

## Labeling

***The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with AF488 using standard chemical labeling method. The residual AF488 is removed by molecular sieve treatment during purification process.***

## Purity

>90% as determined by SDS-PAGE.

## Formulation

Supplied as 0.2 μm filtered solution in PBS, pH7.4, 0.03% Proclin300 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.***

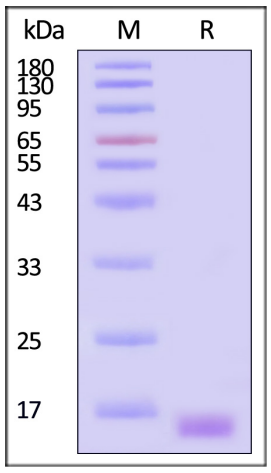
## Storage

***Please protect from light and avoid repeated freeze-thaw cycles.***

This product is stable after storage at:

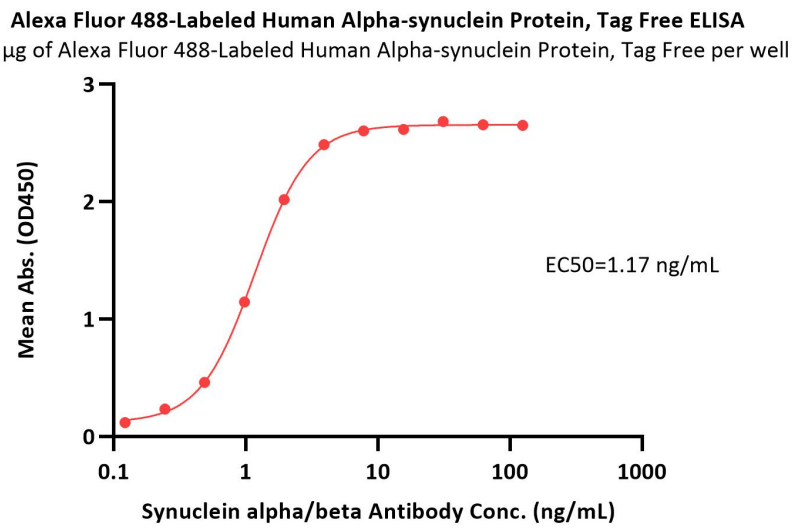
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

## SDS-PAGE




Alexa Fluor 488-Labeled Human Alpha-synuclein Protein, 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% (With Star Ribbon Pre-stained Protein Marker).

## Bioactivity-ELISA




Immobilized Alexa Fluor 488-Labeled Human Alpha-synuclein Protein, Tag Free (Cat. No. ALN-HA113) at 1 μg/mL (100 μL/well) can bind Synuclein alpha/beta Antibody with a linear range of 0.1-2 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 SNAREs (Soluble NSF Attachment Protein REceptors) at presynaptic plasma membrane in conjunction with cysteine string protein-alpha/DNAJC5. 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.