

Synonym

NACP, PARK1, PARK4, PD1

Source

Human Alpha-Synuclein (E46K), Tag Free(ALN-H5117) is expressed from E. coli cells. It contains AA Met 1 - Ala 140 (Accession # [P37840-1](#) (E46K)).

Predicted N-terminus: Met 1

Molecular Characterization

This protein carries no "tag"

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

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Supplied as 0.2 µm filtered solution in 50mM HEPES, 100mM NaCl, pH8.0 with trehalose as protectant.

Contact us for customized product form or formulation.

Shipping

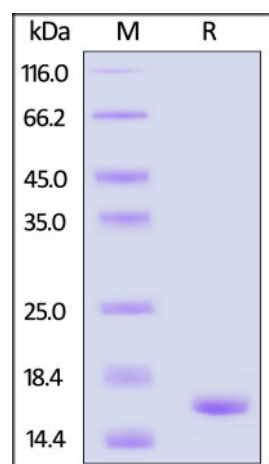
This product is supplied and shipped as sterile liquid solution with dry ice, please inquire the shipping cost.

Storage

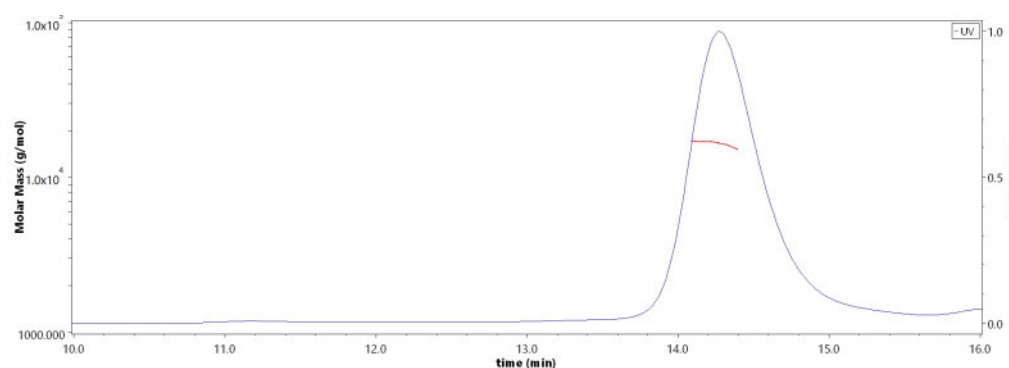
Please avoid repeated freeze-thaw cycles.

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.

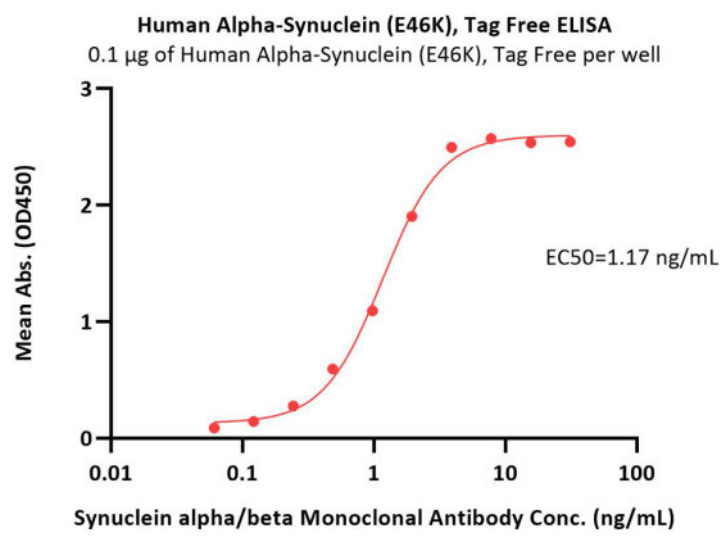
SDS-PAGE

Human Alpha-Synuclein (E46K), Tag Free 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 (E46K), Tag Free (Cat. No. ALN-H5117) is more than 95% and the molecular weight of this protein is around 13-20 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human Alpha-Synuclein (E46K), Tag Free (Cat. No. ALN-H5117) at 1 µg/mL (100 µL/well) can bind Synuclein alpha/beta Monoclonal Antibody with a linear range of 0.1-4 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.