

Recombinant Human Synuclein-α (SNCA) protein (His Tag)

Catalog Number: PDEH100877

Note: Centrifuge before opening to ensure complete recovery of vial contents.

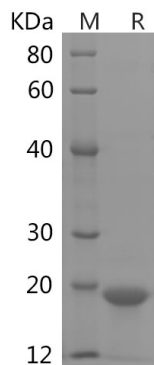
Description

Species	Human
Source	E.coli-derived Human Synuclein-α protein Met1-Ala140, with an N-terminal His & C-terminal His
Calculated MW	15.3 kDa
Observed MW	19 kDa
Accession	P37840
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Alpha-Synuclein (alpha-Syn), also known as NACP or SNCA, exists as at least two structural isoforms: one is helix-rich, membrane-bound form that both the N-and C-terminal regions of alpha-synuclein are tightly associated with membranes and the other is disordered, cytosolic form. Synuclein is found predominantly in the presynaptic termini, in both free or membrane-bound forms. SNCA is extensively localized in nucleus of neurons. It has been shown that alpha-Synuclein was highly expressed in the mitochondria in olfactory bulb, hippocampus, striatum, and thalamus, where the cytosolic alpha-Synuclein was also rich. Normally the unstructured soluble type of alpha-synuclein can aggregate to form insoluble fibrils in pathological conditions characterized by Lewy bodies, such as Parkinson's disease, dementia with Lewy bodies and multiple system atrophy. SNCA abnormality and mitochondrial deficiency are two major changes in the brain of patients with Parkinson's disease (PD). In addition, alpha-synuclein is an abundant component of Lewy bodies in sporadic Parkinson's disease and diffuse Lewy body disease.