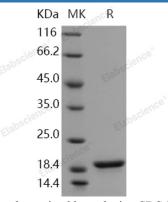
Recombinant Human Alpha-Synuclein/SNCA Protein

Catalog Number: PKSH030906

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

Description	
Species	Human
Source	E.coli-derived Human Alpha-Synuclein/SNCA protein Met 1-Ala 140
Calculated MW	14.5 kDa
Observed MW	19 kDa
Accession	P37840-1
Bio-activity	Not validated for activity
Properties	
Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4
	Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants
	before lyophilization.
	Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.





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Background

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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.