

Recombinant Mouse α -Synuclein/SNCA Protein (His Tag)

Catalog No. PKSM041186

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

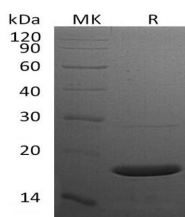
Description

Synonyms	Alpha-synuclein, Non-A beta component of AD amyloid, Non-A4 component of amyloid precursor, NACP, Snca
Species	Mouse
Expression Host	E.coli
Sequence	Met1-Ala140
Accession	O55042
Calculated Molecular Weight	15.9 kDa
Observed molecular weight	18 kDa
Tag	N-His
Bioactivity	Testing in progress

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μ g 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 μ m filtered solution of 20mM PB, 150mM NaCl, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed man
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Alpha-synuclein (Snca) belongs to a family of proteins including α -, β -, and γ -synucleins. Alpha-synuclein has been found

For Research Use Only

to be implicated in the pathophysiology of many neurodegenerative diseases, including Parkinson's disease (PD) and Alzheimer's disease. Many neurodegenerative diseases has shown that alpha-synuclein accumulates in dystrophic neurites and in Lewy bodies. The function of alpha-synuclein is closely correlated with its three-dimensional structure, especially for proteins important in the pathogenesis of neurodegenerative diseases. Alpha-synuclein is a dynamic molecule whose secondary structure depends on the environment. For example, it has an unfolded random coil structure in aqueous solution, forms a-helical structure upon binding to acidic phospholipid vesicles, and forms insoluble fibrils with a high b-sheet content that resemble the filaments found in Lewy bodies. Also, alpha-synuclein was known to associate with 14-3-3 proteins including protein kinase C, BAD, and extracellular regulated kinase, and overexpression of alpha-synuclein could contribute to cell death in neurodegenerative diseases.