

Product datasheet

Recombinant Rat Alpha-synuclein protein (Tagged)
ab226434

1 Image

Description

Product name	Recombinant Rat Alpha-synuclein protein (Tagged)	
Purity	> 90 % SDS-PAGE.	
Expression system	Escherichia coli	
Accession	P37377	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Rat	
Sequence	MDVFMKGLSKAKEGVVAAAEKTKQGVAAEAGKTKEG VLYVGSKTKEGVVH GVTTVAEKTKEQVTNVGGAVVTGVTAVAQKTVEGAG NAAATGFVKKDQM GKGEEGYPQEGILEDMPVDPSSSEAYEMPSEEGYQDY EPEA	
Predicted molecular weight	42 kDa including tags	
Amino acids	1 to 140	
Tags	GST tag N-Terminus	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab226434** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid

Preparation and Storage

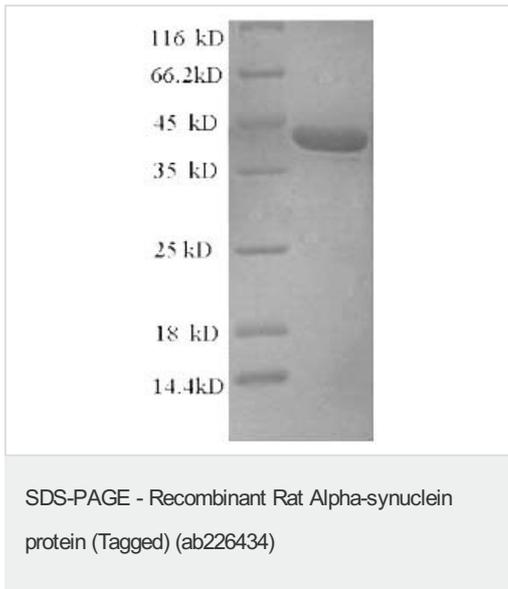
Stability and Storage Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Constituents: 50% Glycerol, Tris buffer

General Info

Function	May be involved in the regulation of dopamine release and transport. Induces fibrillization of microtubule-associated protein tau. Reduces neuronal responsiveness to various apoptotic stimuli, leading to a decreased caspase-3 activation.
Tissue specificity	Expressed principally in brain but is also expressed in low concentrations in all tissues examined except in liver. Concentrated in presynaptic nerve terminals.
Involvement in disease	Genetic alterations of SNCA resulting in aberrant polymerization into fibrils, are associated with several neurodegenerative diseases (synucleinopathies). SNCA fibrillar aggregates represent the major non A-beta component of Alzheimer disease amyloid plaque, and a major component of Lewy body inclusions. They are also found within Lewy body (LB)-like intraneuronal inclusions, glial inclusions and axonal spheroids in neurodegeneration with brain iron accumulation type 1. Parkinson disease 1 Parkinson disease 4 Dementia Lewy body
Sequence similarities	Belongs to the synuclein family.
Domain	The 'non A-beta component of Alzheimer disease amyloid plaque' domain (NAC domain) is involved in fibrils formation. The middle hydrophobic region forms the core of the filaments. The C-terminus may regulate aggregation and determine the diameter of the filaments.
Post-translational modifications	Phosphorylated, predominantly on serine residues. Phosphorylation by CK1 appears to occur on residues distinct from the residue phosphorylated by other kinases. Phosphorylation of Ser-129 is selective and extensive in synucleinopathy lesions. In vitro, phosphorylation at Ser-129 promoted insoluble fibril formation. Phosphorylated on Tyr-125 by a PTK2B-dependent pathway upon osmotic stress. Hallmark lesions of neurodegenerative synucleinopathies contain alpha-synuclein that is modified by nitration of tyrosine residues and possibly by dityrosine cross-linking to generated stable oligomers. Ubiquitinated. The predominant conjugate is the diubiquitinated form. Acetylation at Met-1 seems to be important for proper folding and native oligomeric structure.
Cellular localization	Cytoplasm, cytosol. Membrane. Nucleus. Cell junction, synapse. Secreted. Membrane-bound in dopaminergic neurons.

Images



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) analysis of ab226434 with 5% enrichment gel and 15% separation gel.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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