

Alpha Synuclein Active Protein | SNCA active protein

Alpha Synuclein Protein

CATALOG #
AAA103871

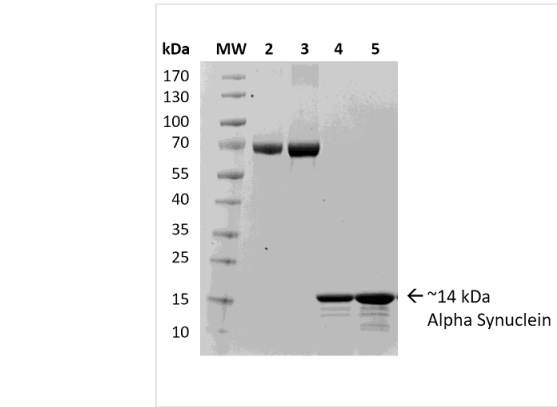
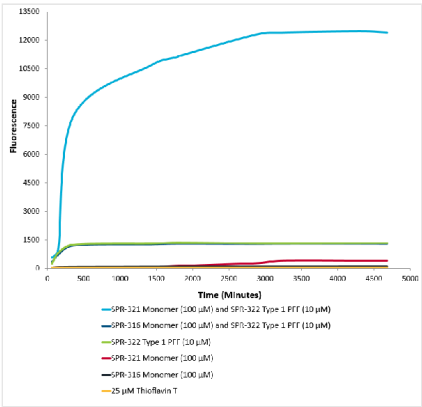
APPLICATIONS
SDS-Page, Western Blot

PRODUCT SYNONYMS

Alpha Synuclein; Alpha Synuclein Protein; Alpha synuclein monomer; Alpha-synuclein monomer; Alpha synuclein protein monomer; Alpha-synuclein protein; Non-A beta component of AD amyloid protein; Non-A4 component of amyloid precursor protein; NACP protein; SNCA protein; NAC; SNCA active protein

PRODUCT SPECIFICATIONS

Specificity	~14.46 kDa
Purity/Purification	Ion-exchange Purified
Form/Format	PBS pH7.4
Concentration	2 mg/ml (varies by lot)
Applicable Applications for SNCA active protein	Invitro Assay, SDS-PAGE, WB (Western Blot)
Nature	Recombinant
Species	Human
Expression System	E. coli
Protein Length	Full Length
Tag	No tag
Certificate of Analysis	Certified 92% pure using SDS-PAGE analysis.
Research Area(s)	Neuroscience, Neurodegeneration, Parkinson's Disease, Alzheimer's Disease
Cellular Localization	Cellular Localization, Membrane, Nucleus
Preparation and Storage	Ships on dry ice. Store at -80°C; 1 year+ Avoid freeze/ thaw cycle.



SDS-PAGE
SDS-PAGE of ~14 kDa Human Recombinant Alpha Synuclein Protein Monomer . Lane 1: Molecular Weight Ladder (MW). Lane 2: BSA (2.5 ug). Lane 3: BSA (5 ug). Lane 4: Alpha Synuclein Protein Monomer (2.5 ug) . Lane 5: Alpha Synuclein Protein Monomer (5 ug) .

Application Data
Type 1 alpha synuclein preformed fibrils seed the formation of new alpha synuclein fibrils from the pool of alpha synuclein monomers . Thioflavin T is a fluorescent dye that binds to beta sheet-rich structures, such as those in alpha synuclein fibrils. Upon binding, the emission spectrum of the dye experiences a red-shift and increased fluorescence intensity. Thioflavin T emission curves show increased fluorescence (correlated to alpha synuclein protein aggregation) over time when 10 uM of Type 1 alpha synuclein preformed fibrils is combined with 100 uM of alpha synuclein monomer , as compared to when 10 uM of Type 2 alpha synuclein preformed fibrils is combined with 100 uM of alpha synuclein monomer or 100 uM of alpha synuclein monomer . Thioflavin T ex = 450 nm, em = 485 nm.

ADDITIONAL INFORMATION

Related Product Information for SNCA active protein	Function: Alpha-Synuclein (SNCA) is expressed predominantly in the brain, where it is concentrated in presynaptic nerve terminals (1). Alpha-synuclein is highly expressed in the mitochondria of the olfactory bulb, hippocampus, striatum and thalamus (2). Functionally, it has been shown to significantly interact with tubulin (3), and may serve as a potential microtubule-associated protein. It has also been found to be essential for normal development of the cognitive functions; inactivation may lead to impaired spatial learning and working memory (4). SNCA fibrillar aggregates represent the major non A-beta component of Alzheimers disease amyloid plaque, and a major component of Lewy body inclusions, and Parkinson's disease. Parkinson's disease (PD) is a common neurodegenerative disorder characterized by the progressive accumulation in selected neurons of protein inclusions containing alpha-synuclein and ubiquitin (5, 6).
Product Categories/Family for SNCA active protein	Neuroscience; Neurodegeneration; Parkinson's Disease; Alzheimer's Disease
References	1. "Genetics Home Reference: SNCA". US National Library of Medicine. (2013). 2. Zhang L., et al. (2008) Brain Res. 1244: 40-52. 3. Alim M.A., et al. (2002) J Biol Chem. 277(3): 2112-2117. 4. Kokhan V.S., Afanasyeva M.A., Van'kin G. (2012) Behav. Brain. Res. 231(1): 226-230. 5. Spillantini M.G., et al. (1997) Nature. 388(6645): 839-840. 6. Mezey E., et al. (1998) Nat Med. 4(7): 755-757.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507109
NCBI GeneID	6622
NCBI Accession #	NP_000336.1
NCBI GenBank Nucleotide #	NM_000345.3
UniProt Accession #	P37840; Q13701; Q4JHI3; Q6IAU6; A8K2A4
NCBI Official Full Name	alpha-synuclein isoform NACP140
NCBI Official Synonym Full Names	synuclein alpha
NCBI Official Symbol	SNCA
NCBI Official Synonym Symbols	PD1; NACP; PARK1; PARK4

NCBI Protein Information	alpha-synuclein
UniProt Protein Name	Alpha-synuclein
UniProt Gene Name	SNCA
UniProt Synonym Gene Names	NACP; PARK1; NACP
UniProt Entry Name	SYUA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/active-protein/alpha-synuclein/103871>