

Alpha Synuclein Protein

Active Human Recombinant Alpha Synuclein Protein Aggregate
Catalog No. SPR-322



Overview

Product Name

Alpha Synuclein Protein

Description

Active Human Recombinant Alpha Synuclein Protein Aggregate

Applications

WB, SDS-PAGE, In vivo assay, In vitro assay

Concentration

Lot/batch specific. See included datasheet.

Conjugates

No tag

Nature

Recombinant

Species

Human

Expression System

E. coli

Amino Acid Sequence

MDVFMKGLSKAKEGVVAAAETKQGVAAEAGKTKEGVLVYGSKTKEGVVHGVATVAEKTKEQVTNVGGAVVTGVTAVAQKTVEGAGSIAAATGFVKKDQLGKNEEGAPQEGILEDMPVDP
DNEAYEMPSEEGYQDYEPEA

Purity

>95%

Protein Length

Full Length

Biological Activity

Endogenous alpha-synuclein phosphorylation. 100 μ M alpha synuclein protein monomer (SPR-321) seeded with 10 nM alpha synuclein protein aggregate (SPR-322) in 25 μ M Thioflavin T (PBS pH 7.4, 100 μ l reaction volume) generated a fluorescence intensity of 13,000 Relative Fluorescence Units after incubation at 37°C with shaking at 600 rpm for 24 hours. Fluorescence was measured by excitation at 450 nm and emission at 485 nm on a Molecular Devices Gemini XPS.

Properties

Storage Buffer

PBS

Storage Temperature

-80°C

Shipping Temperature

Dry Ice. Shipping note: Product will be shipped separately from other products purchased in the same order.

Purification

Ion-exchange Purified

Specificity

~14.46 kDa

Cite This Product

Human Recombinant Alpha Synuclein Protein (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SPR-322)

Certificate Of Analysis

Certified >95% pure using SDS-PAGE analysis.

Biological Description

Alternative Names

Active Alpha synuclein pre-formed fibrils, Active Alpha synuclein aggregates, Active Alpha synuclein protein aggregates, Active Alpha synuclein aggregates, Active Alpha-synuclein protein, Non-A beta component of AD amyloid protein, Non-A4 component of amyloid precursor protein, NACP protein, SNCA protein, NACP protein, PARK1 protein, SYN protein, Parkinson disease familial 1 Protein, Active Alpha synuclein protein seed

Research Areas

Alzheimer's Disease, Neurodegeneration, Neuroscience, Parkinson's Disease

Cellular Localization

Cytoplasm, Membrane, Nucleus

Accession Number

NP_000336.1

Gene ID

6622

Swiss Prot

P37840

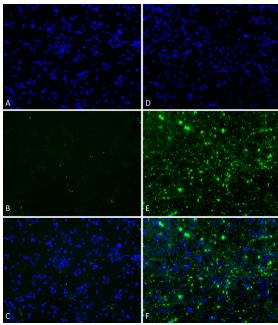
Scientific Background

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

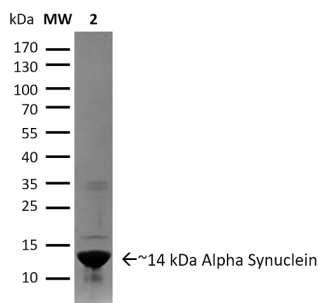
References

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.

Product Images



Primary rat hippocampal neurons show lewy body inclusion formation when treated with active Alpha Synuclein Protein Aggregate (SPR-322) at 4 µg/ml (D-F), but not when treated with control Alpha Synuclein Protein Aggregate (SPR-317) at 4 µg/ml (A-C). Tissue: Primary hippocampal neurons. Species: Sprague-Dawley rat. Fixation: 4% formaldehyde from PFA. Primary Antibody: Mouse anti-pSer129 Antibody at 1:1000 24 hours at 4°C. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:700 for 1 hours at RT. Counterstain: Hoechst (blue) nuclear stain at 1:4000 for 1 hour at RT. Localization: Lewy body inclusions. Magnification: 70x.



SDS-PAGE of ~14 kDa Active Human Recombinant Alpha Synuclein Protein Aggregate (SPR-322). Lane 1: Molecular Weight Ladder (MW). Lane 2: Active Alpha Synuclein Protein Aggregate (SPR-322).

Product Citations (0)

Currently there are no citations for this product.

Reviews

There are no reviews yet.