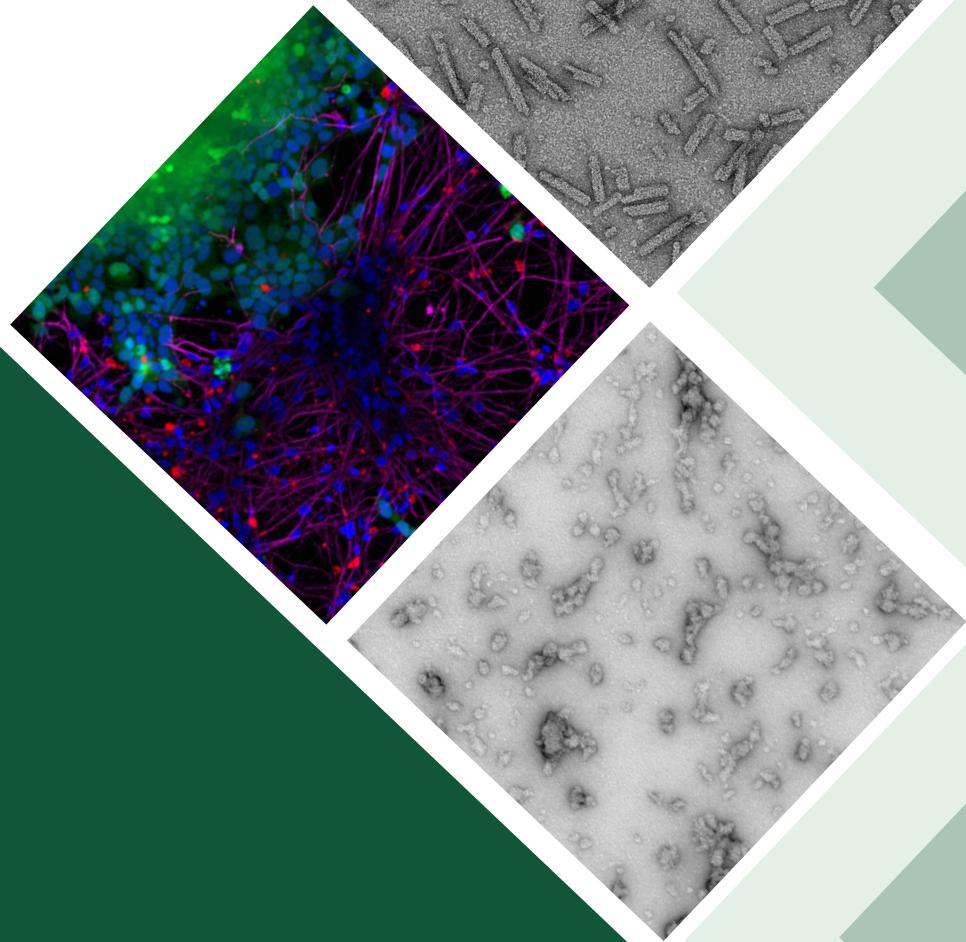




**StressMarq**  
Biosciences INC.



# Alpha Synuclein

**Pre-formed Fibrils | Oligomers | Monomers | Antibodies**

[stressmarq.com/snca](http://stressmarq.com/snca)



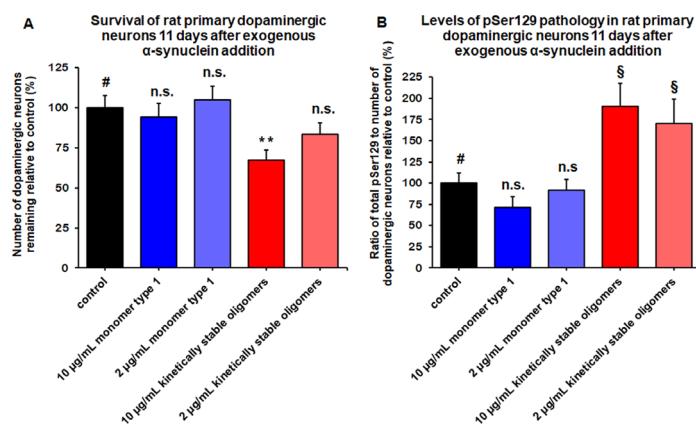
**Alpha Synuclein  
Citations**

# Pre-formed Fibrils | Oligomers | Monomers

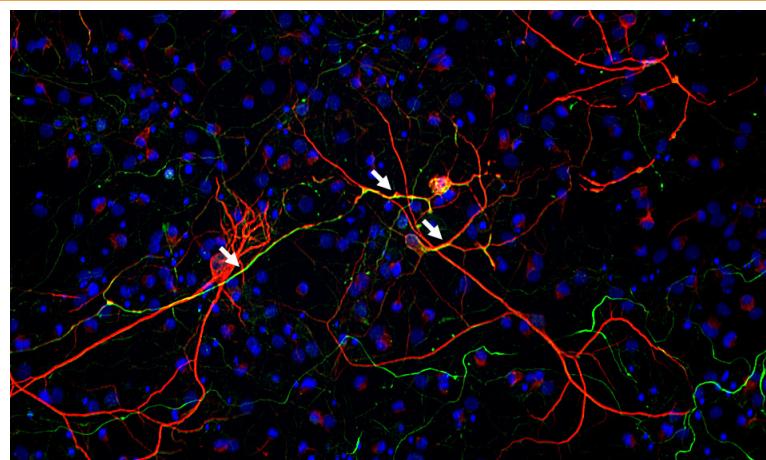
## Tools for Neurodegenerative Disease Research

Alpha synuclein is a highly soluble, small protein without intrinsic structure, abundantly present in the brain, primarily in presynaptic terminals of neurons. It is involved in synaptic vesicle release for signaling, including dopamine, which is important for movement. Alpha synuclein has been shown to aggregate into various oligomeric and fibrillary forms and soluble, misfolded alpha synuclein aggregates are neurotoxic and can spread disease in a prion-like fashion. "Synucleinopathies" are a group of neurodegenerative diseases that includes Parkinson's disease (PD), dementia with Lewy bodies (DLB), diffuse Lewy body disease (DLBD), and multiple system atrophy (MSA), which are all caused by misfolded alpha synuclein. Indeed, alpha synuclein aggregation is a hallmark of Parkinson's disease and different forms of the protein can be used to develop disease models that reproduce the pathological features of this disorder. StressMarq manufactures the largest range of monomeric, oligomeric and fibrillar alpha synuclein constructs for neurodegenerative disease research.

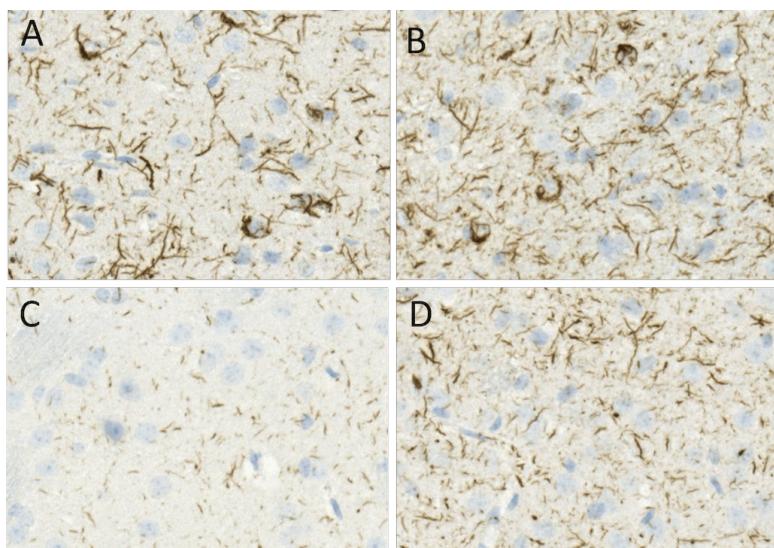
## Fibrils and Oligomers Induce Toxicity and pSer129 Pathology



Kinetically Stable Alpha Synuclein Oligomers (catalog# SPR-484) show toxicity to rat primary dopaminergic neurons.

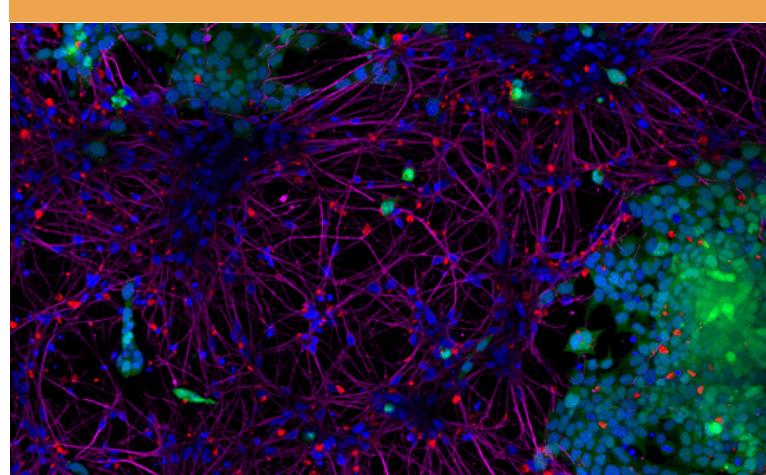


Parkinson's-associated pSer129 pathology induced in rat primary dopaminergic cells with KS Alpha Synuclein Oligomers (catalog# SPR-484).



Spread of aggregates throughout mouse brain after injection with Mouse Alpha Synuclein PFFs (catalog# SPR-324). (A) contralateral cortex (B) ipsilateral cortex (C) contralateral striatum (D) ipsilateral striatum

## Cell-to-Cell Transmission



Alpha Synuclein PFFs (catalog# SPR-322, red) were shown to be taken up by SH-SY5Y cells (green) and transmitted to neuronal iPSCs (magenta) within 14 days.

# Pre-formed Fibrils | Oligomers | Monomers

## Alpha Synuclein Pre-formed Fibrils (PFFs) & Monomers

Product Description	Pre-formed Fibrils Catalog#	Monomers Catalog#
Human Alpha Synuclein (Type 1)	SPR-322	SPR-321
Human Alpha Synuclein: ATTO 594	SPR-322-A594	-
Human Alpha Synuclein (Type 2)	SPR-317	SPR-316
Mouse Alpha Synuclein (Type 1)	SPR-324	SPR-323
Human Alpha Synuclein N-Terminal Acetylated (Type 1)	SPR-332	SPR-331
Human Alpha Synuclein A53T Mutant (Type 1)	SPR-326	SPR-325
Human Alpha Synuclein A90C Mutant	-	SPR-478
Human Alpha Synuclein S87N Mutant	SPR-500	SPR-499
Human Alpha Synuclein S129A Mutant	SPR-506	SPR-505
Human Alpha Synuclein A53T, S87N, N103G Mutant	SPR-504	SPR-503
Human Alpha Synuclein E114C Mutant: ATTO 488	SPR-518-A488	SPR-517-A488
Human Alpha Synuclein: Biotinylated (C-terminus)	SPR-508	SPR-507
Cynomolgus Alpha Synuclein: Biotinylated (C-terminus) <b>NEW!</b>	SPR-528	SPR-527
Human Alpha Synuclein pSer129	SPR-521	SPR-520
Human Alpha Synuclein Filaments (Immature Fibrils)	SPR-450	-
Rat Alpha Synuclein	SPR-482	SPR-481
Alpha Synuclein: RT-QuIC/SAA Substrate <b>COMING SOON!</b>	-	SPR-519

## Alpha Synuclein & Tau Co-Polymer Fibrils

Product Description	Catalog#
Human Alpha Synuclein and Tau-441 (2N4R) Co-Polymer Fibrils	SPR-495
Human Alpha Synuclein and Tau-352 (fetal 0N3R) Co-Polymer Fibrils	SPR-494

## Alpha Synuclein Oligomers

Product Description	Catalog#
Human Alpha Synuclein Oligomers (Kinetically Stable)	SPR-484
Human Alpha Synuclein Oligomers (Dopamine HCl Stabilized)	SPR-466
Human Alpha Synuclein Oligomers (EGCG Stabilized)	SPR-469

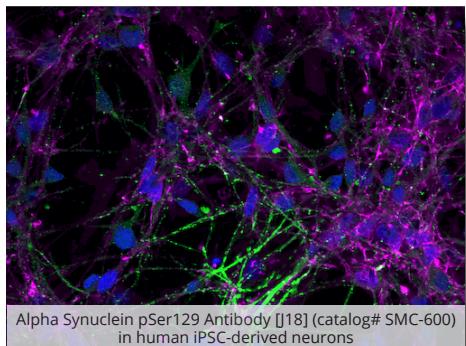
# Antibodies | Custom Services | Bulk Quantities

## Monoclonal Antibodies

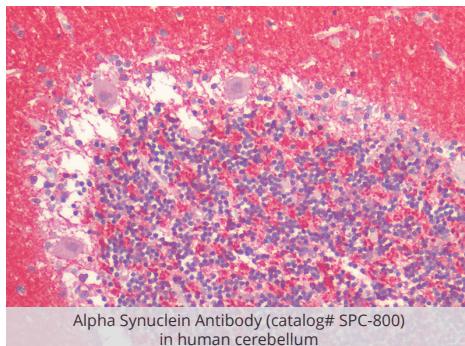
Target	Clone	Host	Applications	Reactivity	Catalog#
Alpha Synuclein	3C11	Mouse	WB, ICC/IF	Hu, Ms, Rt	SMC-530
Alpha Synuclein	10H7	Mouse	WB, ICC/IF	Hu, Ms, Rt	SMC-531
Alpha Synuclein	3F8	Mouse	WB, ICC/IF, IHC	Hu, Ms, Rt	SMC-532
Alpha Synuclein	4F1	Mouse	WB, ICC/IF, IHC	Hu, Ms, Rt	SMC-533
Alpha Synuclein (pSer129)	J18	Rabbit	WB, IHC	Hu, Ms	SMC-600
Alpha Synuclein (Aggregate-Specific)	2F11	Mouse	WB, DB, IP, ICC/IF, IHC, ImmunoGold labeling	Hu, Ms	SMC-617
Alpha Synuclein (N-terminal) <b>NEW!</b>	11D4	Mouse	WB, IHC	Hu, Ms, Rt	SMC-621

## Polyclonal Antibodies

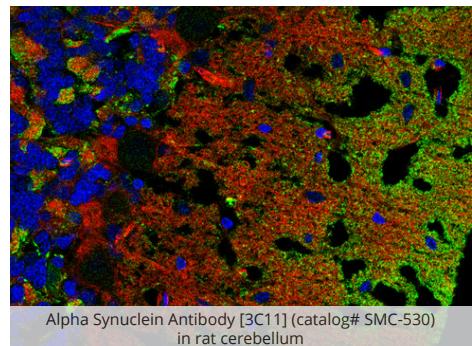
Target	Clone	Host	Applications	Reactivity	Catalog#
Alpha Synuclein	PAb	Rabbit	WB, IHC	Hu, Ms, Rt	SPC-800
Alpha Synuclein (pSer129)	PAb	Rabbit	WB, ICC/IF, IHC	Hu, Ms, Rt	SPC-742



Alpha Synuclein pSer129 Antibody [J18] (catalog# SMC-600) in human iPSC-derived neurons



Alpha Synuclein Antibody (catalog# SPC-800) in human cerebellum



Alpha Synuclein Antibody [3C11] (catalog# SMC-530) in rat cerebellum

## Custom & Bulk Neurodegenerative Proteins

StressMarq is the market leader in the development and commercialization of an extensive range of unique fibrillar, oligomeric, and monomeric protein preparations for use in neurodegenerative disease research. As groundbreaking research demands precision and flexibility, StressMarq is pleased to offer **custom modifications** of our existing neurodegenerative protein constructs, as well as **bespoke monomers, fibrils, and oligomers** tailored to your exact specifications. **Bulk quantities**, with or without modification, are also available upon request.

To learn more or to discuss your project needs, please visit our website or contact us at [info@stressmarq.com](mailto:info@stressmarq.com).