

DATA SHEET

Product Name: FITC Alpha-Synuclein, Preformed Fibrils

Catalog #: ASF-1113

Source: Recombinant. A DNA sequence encoding the human Alpha-Synuclein sequence was expressed in E. coli with FITC molecules attached for fluorescence. This fluorescent monomer underwent proprietary fibrillization procedures.

Estimated Size: 50nm-200nm*

Protein Purity: >95%

Counter Ion: 200mM Tris-HCl, 250mM NaCl pH 7.4

Supplied As: Frozen Liquid

Storage: -80°C

Description: Alpha-Synuclein (α -Synuclein) is a presynaptic protein found to be a major component of Parkinson's Disease (PD) aggregates and is implicated in the pathogenesis of PD and related neurodegenerative disorders. While some fluorescent Alpha-Synuclein on the market uses intrinsic fluorescence or adds in tryptophan residues by mutations, rPeptide's human Alpha-Synuclein has been covalently labeled with Fluorescein Isothiocyanate and assayed for fluorescence. Lysine residues of the native Alpha-Synuclein sequence were used as labeling sites, leaving the cysteine residues unaffected. This FITC labeled form of human Alpha-Synuclein was then formed into fibrils according to rPeptide's proprietary methods. Fibril formation is determined by TEM and thioflavin assay. The FITC Alpha-Synuclein fibrils are sold in 200mM Tris, 250mM NaCl, pH 7.4 and may be suitable for experimental use or as controls in aggregation kinetics, fibril morphology, seeding experiments, or in vivo imaging.

References:

1. Roberi, M., et al., (2007), Nature Methods, 4, 345-351
2. Chung, C., et al., (2022), Analytical Chemistry, 94 13
3. Reynolds, N., et al., (2011), Journal of the American Chemical Society, 133, 48

Notes: *The preformed fibrils were produced from recombinantly purified, FITC-labeled monomeric protein. The fibrils have not been tested for activity or stability. The product has an average estimated size of 50nm-200nm as determined by TEM.

For research use only. Not for use in humans.