

**TriDix Bio**  
INNOVATING DRUG DISCOVERY

## PRODUCT DATA SHEET

### Alpha-Synuclein (A30P) Pre-formed Fibrils

SKU: TDA-1103-100

#### Product Details

**Product Name:** Alpha-Synuclein (A30P) Pre-formed Fibrils

**Catalog Number:** TDA-1203-100

**Organism:** *Homo Sapiens*, Human

**Nature:** Recombinant

**Package Size:** 100ug in 1mg/ml concentration

**Conjugates:** No tag

**Protein Length/Size:** Full Length

**Expression System:** *E. coli*

**Amino Acid Sequence:** MDVFMKGLSK AKEGVVAAAE KTKQGVAEAP GKTKEGVLYV  
GSKTKEGVVH GVATVAEKTK EQVTNVGGAV VTGVTAVAQK TVEGAGSIAA ATGFVKKDQL  
GKNEEGAPQE GILEDMPVDP DNEAYEMPSE EGYQDYEPEA

**Purity:** >95% by SDS-PAGE

#### Storage Conditions & Shipment

**Storage Buffer:** PBS pH 7.4

**Product Format/Shipped:** Cryopreserved / Dry ice

**Storage Temperature:** -80°C for long term storage; avoid freeze/thaw cycle

#### Safety Precaution

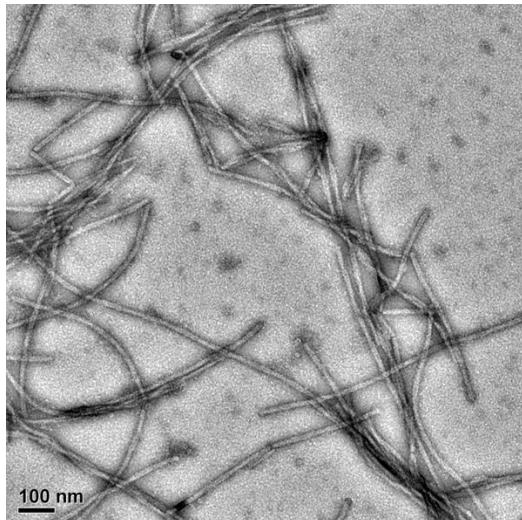
**PLEASE READ BEFORE HANDLING ANY FROZEN VIALS.** Please wear appropriate Personal Protection Equipment (lab coat, thermal gloves, safety goggles and a face shield) when handling

## Description

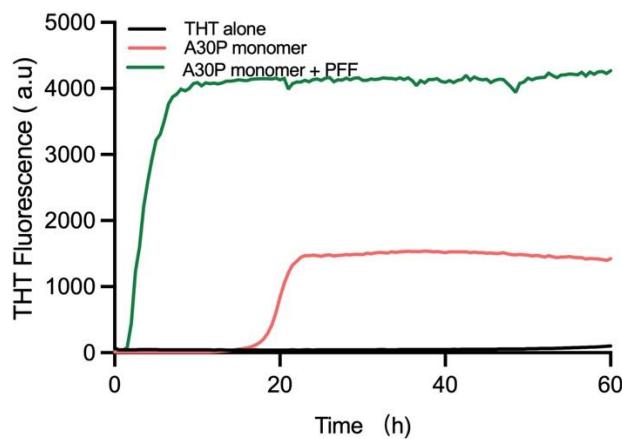
Alpha-synuclein (SNCA) fibrils, also referred to as pre-formed fibrils (PFFs), represent the pathogenic aggregated form of alpha-synuclein that is central to the development of synucleinopathies. Alpha-synuclein is predominantly expressed in the brain, where it is enriched at presynaptic nerve terminals and localized to mitochondria in multiple regions, including the olfactory bulb, hippocampus, striatum, and thalamus.

Pathological alpha-synuclein fibrils constitute the principal structural component of Lewy bodies and Lewy neurites, the defining hallmarks of Parkinson's disease (PD). In PD and related disorders, intracellular accumulation of alpha-synuclein fibrils, often co-localized with ubiquitin, occurs selectively in vulnerable neuronal populations and drives progressive neurodegeneration. In addition, alpha-synuclein fibrillar aggregates have been identified as a major non-amyloid- $\beta$  component of amyloid plaques in Alzheimer's disease, highlighting their broader relevance in neurodegenerative pathology.

## Product Data



TEM of alpha-Synuclein (A30P) Pre-formed Fibrils





Thioflavin T (ThT) aggregation kinetics of  $\alpha$ -synuclein A30P monomer with and without preformed fibril (PFF) seeding.

Time-dependent ThT fluorescence of recombinant  $\alpha$ -synuclein A30P monomer alone (red) and in the presence of preformed fibril seeds (A30P monomer + PFF(5%), green). The unseeded A30P monomer displays a characteristic sigmoidal aggregation profile with a defined lag phase followed by fibril growth, whereas PFF seeding markedly accelerates aggregation, resulting in a rapid increase in ThT fluorescence and an early high-fluorescence plateau. ThT alone (black) served as a negative control and remained at baseline fluorescence throughout the assay. Fluorescence intensity is shown in arbitrary units (a.u.).

## Applications

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

## Disclaimers

*This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.*