

PRODUCT DATA SHEET

Amyloid Beta 1-40 oligomer

SKU: TDA-1202-100

Product Details

Product Name: Amyloid Beta 1-40 Oligomers

Synonyms:

Catalog Number: TDA-1202-100

Organism: *Homo Sapiens*, Human

CAS Number: 131438-79-4

Package Size: 100ug in 1mg/ml concentration

Conjugates: No tag

Amino Acid Sequence: DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIGLMVGGVV

Purity: >95% by SDS-PAGE

Protein Length/Size: 40 amino acid/4329 Da

Preparation: TFA (Synthetic)

Storage Conditions & Shipment

Storage Buffer: Phosphate buffer (PB) 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

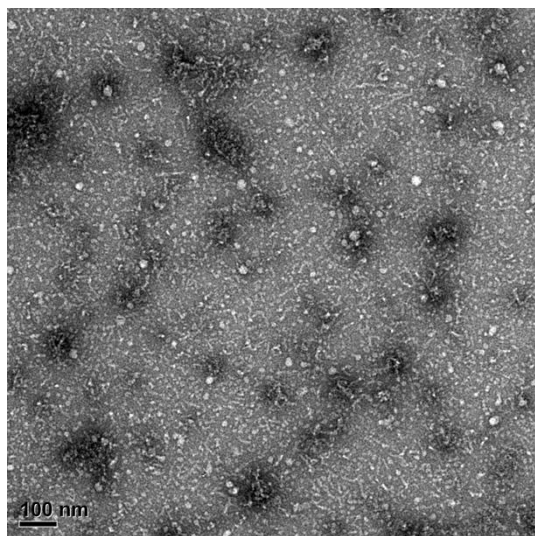
Description

Amyloid Beta 1–40 (A β 40) oligomers are soluble, metastable assemblies of the 40-amino-acid β -amyloid peptide and represent an important intermediate species in the amyloid aggregation pathway. While A β 40 is less aggregation-prone than A β 42, its oligomeric forms are increasingly recognized for their biological relevance and contribution to amyloid dynamics in Alzheimer's disease (AD).

A β 40 oligomers are generated through controlled in vitro assembly of monomeric A β 40 under defined conditions, yielding low- to mid-order soluble aggregates. These oligomeric species are structurally distinct from monomers and mature fibrils and display unique biochemical and biophysical properties, including enhanced surface hydrophobicity and conformational flexibility.

Functionally, A β 40 oligomers have been implicated in modulating amyloid nucleation, cross-seeding interactions with other amyloidogenic proteins, and synaptic signaling pathways. They serve as valuable tools for dissecting early aggregation events, oligomer-specific toxicity, and isoform-dependent differences in amyloid behavior.

Product Data



TEM of A β 40 oligomers

Applications

1. Studies of amyloid oligomer formation and stability;
2. Structure–function analysis of A β oligomers;
3. Cross-seeding and amyloid polymorphism research;
4. Screening of oligomer-specific antibodies and inhibitors;

5. In vitro models of early amyloid-associated neurotoxicity;

Protocols

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.