CNS-3D Induced Alzheimer's Model

Evaluate anti-amyloid beta drug efficacy in human neuroimmune organoids with a standardized amyloid beta induction workflow.

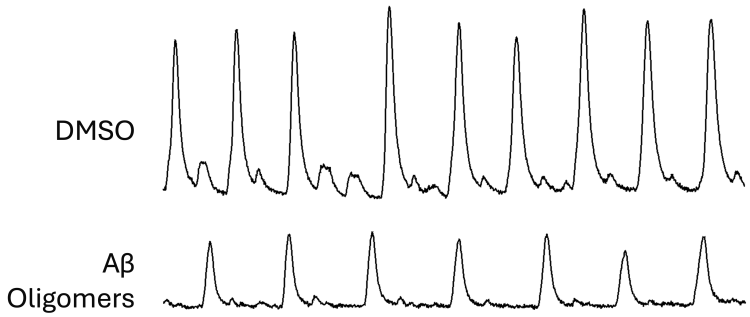
Overview

Designed for anti-amyloid beta efficacy studies, the CNS-3D Induced Alzheimer's Model helps researchers assess whether drug candidates reduce amyloid-driven cellular, inflammatory, molecular, and functional changes. By standardizing disease induction, it reduces the burden of model development so teams can focus on evaluating candidate efficacy. For teams that want full study execution and analysis, the same workflow is also available through CNS Services.

Application

Alzheimer's Disease

Induce Alzheimer's-relevant phenotypes—including tau phosphorylation, apoptosis, neuronal network disruption, and gene expression changes—through exogenous amyloid beta exposure in CNS-3D Induced Alzheimer's Model. This assay enables higher-throughput evaluation of whether drug candidates reduce amyloid-driven pathology and preserve neuronal function.



Amyloid beta oligomers induce concentration-dependent suppression of neuronal network activity measured by calcium imaging.

FOR RESEARCH USE ONLY

Technical Specifications

Specification	Details
Kit Contents	CNS-3D Inflammatory Organoids, amyloid beta oligomers
Cell Composition	45% neurons (~90% glutamatergic, ~10% GABAergic), 45% astrocytes and 10% microglia.
Assay	Multiplexed functional and molecular endpoints, including calcium imaging (e.g., FLIPR), viability (CellTiter-Glo), cytotoxicity (LDH-Glo), protein biomarker analysis (e.g., MSD, Ella), high-content imaging, and transcriptomic profiling.

Ordering Information

CNS-3D Induced Alzheimer's Model is available in 24-, 48-, 96-, and 384-replicate formats.

Product Name	Replicates per Plate	Plate Format	Catalog Number
CNS-3D Induced Alzheimer's Model	24	96-well	P-C3A-24-V1
	48	96-well	P-C3A-48-V1
	96	96-well	P-C3A-96-V1
	384	384-well	P-C3A-384-V1